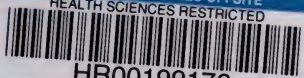


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"Quantam ego quidem video motus morborum fere omnes a motibus in systemate nervorum ita pendent ut morbi fere omnes quodammodo Nervosi dici queant."—CULLEN'S NOSOLOGY: BOOK II, P. 181—EDINBURG ED., 1780.

THE Alienist and Neurologist

A JOURNAL OF
Scientific, Clinical and Forensic

*NEUROLOGY AND PSYCHOLOGY,
PSYCHIATRY AND NEURIATRY.*

Intended Especially to Subserve the Wants of the
General Practitioner of Medicine.

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CHARLES H. HUGHES, M. D., Editor.
MARC RAY HUGHES, M. D., Associate Editor.

HENRY L. HUGHES, Manager and Publisher.

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CONTRIBUTORS AND COLLABORATORS.

TO VOLUME XXVIII.

HARRIET C. B. ALEXANDER,
Chicago.

ALBERT S. ASHMEAD,
New York.

JOSEPH COLLINS,
New York.

EDWIN G. ZABRISKIE,
New York.

G. F. ADAMS,
Kenosha, Wis.

R. W. SHUFELDT,
New York.

C. H. HUGHES,

HAROLD N. MOYER,
Chicago.

HAVELOCK ELLIS,
Cornwall, Eng.

JAS. G. KIERNAN,
Chicago.

DR. GIERLICH,
Weisbaden.

THEODORE SCHROEDER,
New York.

WHARTON SINKLER,
Philadelphia.

St. Louis.

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SOME PSYCHOLOGICAL STUDIES OF MAN'S
MORAL EVOLUTION.

By ALBERT S. ASHMEAD, M. D.,
NEW YORK.

I.

THE MYSTERY OF OUR KNOWLEDGE OF GOOD AND EVIL—ITS
ZENITH AND ITS NADIR.*

THE occult power of evil is remembered also in an incident I have before related, of the breaking of a goblet by a little black imp, seen only by the mother of an absent child. This mother was lying on her couch and the goblet was upon a table. She saw the black elf, standing on the table beside the goblet, raise a hammer as if to strike the goblet rim. She cried out, "He is going to break it;" "He will break it;" "He has broken it." And it fell in a thousand pieces to the floor.

At that very moment the breath of her dearly beloved child had left its body, in a distant city.

I recall also the story of the voice which a gentleman heard, who was traveling eastward from San Francisco. It commanded him to "Go back." Finally by its persisting, on going to the baggage car, at some stopping station, where he had determined to obey the strange command, and

*Continued from November, 1906.

where he supposed he would meet with much trouble to find his trunk among the multitudinous baggage, he found the baggage car door open and the baggage master with his identical trunk awaiting him. The baggage man stood there, with his hand resting on his trunk ready to pass it out to him. Upon his return to San Francisco, by the back bound train which passed the station where he got off a few minutes after he had left the east bound train, he found his old father breathing his last. He lived but two hours after his son's return.

"Ah!" says the Fatalist or the Occultist, "I have neither faith nor reverence. There is no Free-will. We are all helpless." It is worthy of note here that the advance of human insight into natural law is accompanied by the cast of thought indicated by the Buddhist's belief in Nirvana.

The occult must be approached by the path of Reason.

All that happened to Dr. Love for instance, is happening daily to everybody. On the doctrine of chances, could there have been a concentration upon his family? or, was there a Direction, an Intention?

Another case, that of a Dr. Patterson, is likewise here pertinent, and directly in line with the theory of involuntarism; and the review of this case by the alienist, Dr. McGuire, shows in mentality, all the mind phenomena; the same simulation, dissimulation, and later determination, that Nature exhibits in bodily ills that our medical profession devotes itself to studying. Dr. Patterson, of Colorado, gloried in his criminality. "When a child," he says, "I felt the influence of heredity, felt that I was born to be a thief." "It is necessary," he says further, "for society to protect itself against men of my class."

I agree with him, and I also believe that he states the truth as to his feelings. Society must protect itself against lunatics, without conscience and without remorse. But are these beings really lunatics because evil, as we know it, has obtained possession of their bodies, brains and other cells?

For years a careful student of criminology, taking the deepest interest in the study, because he recognized in himself the proof of the theory that a criminal is what he

is because he is born with instincts, the development of which neither environment, fear of punishment, social ostracism nor anything else can prevent, this Dr. Patterson, now confined in a cell in the jail at Denver, was arrested on a charge of forgery. In his early years he fought against his inherent desire to take what belonged to his fellow man, because of the disgrace that he feared his father, mother, and other loved ones would suffer from his actions, and for the sake of his wife and children, he continued to wage the unequal battle. It was heredity versus environment, he declares, and heredity won.

This is the excuse he gives for his present condition. From a man of prominence and an heir to great wealth, the police found that his fall was so complete that he was living in the most abject poverty in a dingy room in the lowest quarter of the city.

"My one great regret in life," he says, "is that I have fallen a slave to the morphine habit and, unable to resist its use, have failed in my ambition to become the greatest criminal of the age."

"I glory in crime and am a criminal because it is impossible for me to be anything else. I have tried and failed, and am glad of it. The fight was unequal at best, and I am glad that I finally started out in a career of crime and that I have committed thefts and burglaries, have stolen into houses at night time and taken property that belonged to others, for the pure love of it.

"I did not need the money, did not want the booty that I took away after I got it, but there was a satisfaction too deep for words, too self-satisfying for explanation. I imagine that a woman who has held her lover at arm's length and perhaps for the best of reasons, has refused to surrender to him for a long time, must feel much as I did when I committed my first theft. It was not much, too little a thing to notice, yet it was the beginning of a career that I mapped out for myself after I fully realized that there was nothing in the world that could prevent my being anything but a thief. I was in a fellow physician's office and I saw a pocket book lying on the table. He was

busy with a patient and I opened the wallet and found two dollars in it. I then had plenty of money and the contents of the purse could do me little good, but resist the desire to take the money I could not and did not. I knew that the high character I bore would protect me from the possibility of exposure, and the cunning, which I have since learned and which I use to protect me from being found out when I succumbed to my desire to take possession of that which does not belong to me, was not necessary in that case. That was years ago, how many I do not know. It was the beginning.

"My father and mother were of the highest character. The desire which impelled me to take the marbles of other little boys, to filch the pockets of my school-mates, when their coats hung in the coat-room, came from further back than my immediate ancestors, just as the genius of a great painter, or that of a great writer or poet, is inherited from ancestors further back than can be remembered. The desire to commit crime is similar to the desire of a genius to develop the talents which are his. It is often the strongest passion of his life and for which he will give up every thing else, just as an artist will struggle along for years, going without the necessities that he might have in some other walk of life, that he may develop the talent which he feels within himself.

"Born a criminal and forced by a power which cannot be understood to commit crime, I am no more responsible for what I am than are any of the geniuses of the age for what they are. The world honors these men and gives them credit for the work they do because it adds to the world's store of knowledge, but the men who do great things do not do them because they wish to add to the comfort and enjoyment of their fellowman, but because they can do nothing else. They have to do these things because they are made to do them. They do not deserve credit for what they accomplish, and a thief does not deserve censure for the harm he does to society. We can do nothing else. It is a part of him, of his very nature, to steal.

"It is as impossible for me to lead an honest life as it

is for some other men to become criminals. The criminal instinct, however, is more common than the instinct or desire to accomplish great things for the world's good. All criminals are not alike and all are not affected by the same impelling force. Some are murderers and cut-throats, others are sneak thieves and porch climbers, and then there are men and women, too, who take the greatest satisfaction in robbing the less wary by their greater wit and cleverness. No class of mechanics take greater pride in their work than first-class cracksmen, who overcome the thousands of obstacles put in their way when they wish to open a vault. So marvelously skillful are many of these men that if they used the same energy and talent at honest employment they would be great inventors and would receive money and fame for what they accomplished, instead of being social outcasts and always in danger of a policeman's bullet, or of a jail sentence. The risks they take in comparison to the rewards of their work are so great that, considered from a practical standpoint, the business does not pay.

"Doubtless there are many robbers and thieves made so by necessity, but such men never become experts, and when the opportunity offers go back into legitimate lines of work if not captured by the police. Some among them have the criminal instinct in a degree, and when necessity compels them for the first time to commit a crime, it awakens the heretofore dormant instinct in them, and from that time on they are confirmed enemies of society."

The questions connected with the case here cited, which criminologists are most deeply interested in are these: Did Dr. Patterson's constant association with criminals, his deep interest in their lives and the trend of their thoughts wear down his powers of resistance? Did the use of morphine during the later years of his life warp his mentality and blunt his perceptions?

Were his criminal acts the result of rapidly approaching senility or, were they the result of congenital inheritance as claimed by him?

In answer to a hypothetical question Dr. Frank McGuire, one of the best known alienists and criminologists,

said: "It is held by a number of celebrated alienists that the moral and intellectual spheres of thought are separate and distinct. I cannot think so. I do not believe that you can have the moral sphere seriously involved without involving to a certain degree the intellectual sphere. They may not be closely linked, but there is a certain connection between them.

"The instinctive moral sentiment of a person will often rise above adverse environments. Children, when young, will show the moral sphere instinctively. Place many men in bad surroundings and they will still be moral. Take a man whose morals are blunted, for instance—his intellect may be above the ordinary, but he may be a criminal from acquired habit.

"The man referred to in this question, Dr. Patterson, is evidently a congenital criminal with a high grade of intellectuality, with which he covered up his crimes. This intellect led him to be careful. It placed him in a position which made his crimes safer and made him a much more dangerous man. He concealed his congenital moral defect under the garb of eminent respectability, because he had intellect enough to carry out the deception along that line.

"That he was a forger was most natural. The more intellect a criminal possesses the higher the class of crime he will engage in. The only inconsistent thing about this case is the fact that the man committed burglary. This crime belongs naturally to a lower grade of intellect. It requires brute courage. Forgery or embezzlement, or high class sneak thievery would be more in line with his intellect.

"Certainly morphine may have had something to do with it. Again it sometimes happens that there is evidence of moral defects in senility.

"The man's instructive nature evidently exercised a considerably greater influence upon his actions than did his intellectual nature. The defect of his moral sentiment might have been the result of defective organization, as he claims.

"The instructive moral sentiment as a rule rises above defective environment although the moral attributes of the mind are equally as transmissible as the physical.

"Criminals, as a whole, may be divided into four classes as follows:

First—Criminals whose moral sentiment is absent, or slightly developed and the intellect poor. These may be called born delinquents.

Second—The insane delinquents whose moral sentiment is absent and the intellect so far developed as to be above the ordinary. Included in this class are congenital criminals and criminals from acquired habit. The criminal Patterson is probably of this class.

Third—The moral sentiment is developed and guides the ordinary condition of the individual, but has feeble powers of resistance. The mind is influenced by emotions. These are passionnal delinquents.

Fourth—The moral is more or less developed, but becomes perverted by a mental defect, epilepsy or alcoholism, the diseased brain giving new factors influencing the conduct of the individual in his relation to society.

"You may find all criminals under one or the other of these classifications, and I am pretty sure that the man we are speaking of comes under the second head. He resisted crime so long because his instructive sphere was stronger than his inherited tendencies.

"Amputation of criminals' brains? Oh, no! Not until they begin to come into the world with a tag on each convolution of the brain telling just what it is for."

Dr. McGuire's closing remark on brain amputation is, to my understanding, an expression that Nature (or God) is properly presented by the story of Eden, a heartless malefactor, whose evil work Physicians and Pulpits have ever tried to undo. Vain labor! Individuals are comforted by them. But always a throng toward a Mecca.

Faith is an utility, not an evidence—a mixture nine parts Resignation, one part Hope.

It is a matter of Temperament and not of Will. Many appear to have faith, who have it not—it is with such a business asset.

Ingersoll has said: "No man has gone beyond the hor-

izon of the Natural. I do not know whether the grave is a door or a wall."

Youth is the only period when we bound over rough waters; as the age of 60 approaches, or is reached, a malignity and persistence appears which is disastrous, though it may not be any more serious or portentous than the stumbling blocks of the earlier decades of life. All the day, like a cataractous one, we look through a fog. Yet we walk along freely using no more care than is required of the life pedestrian usually. But when the night time comes, we see more clearly, and do not feel that we have eyes. We are indifferent. Faith perhaps we have not. Resignation we possess, certain of a fixed and active principle of Evil to Nature, to which each being is to some degree and from time to time, a victim; the world has no more interest for us—it is the daily Eden and the creeping Serpent, with the Master looking on.

Aided by the cool foggy air of late life, and the gray dawn of the approaching day, we may read the most interesting revelations like that of immorality in Japanese life, (which I published in the *Journal of Dermatology*, July, 1906.)

Only the more hopeless does it cause to appear the plan of the Natural Law.

The two human civilizations, Occidental and Oriental, are now impinging each upon the other—in obedience to the great principle of dissemination, the indiscriminate dissemination everywhere seen.

The plan of the union of the White races against the Yellow as suggested by the paper of Mr. Stein, of our department of Commerce and Labor (Pan-Arya) would certainly introduce among Occidentals the most dreaded feature of Oriental life. The military success of Japan in the late war will be used to show that there is no God, or no Christian God, and that immorality has not weakened a people—no thought being bestowed upon the fact of Negro and Malay parent stock, the great animal base of the present human pyramid being there seen.

In striking (and strange) contrast to the evil side of Oriental character I quote here a lyric and an extract from

Lafcadio Hearn's latest work. They are so beautiful (no matter what their source) that I have selected them for the comparison:—

JAPANESE LYRIC.

My little bird,
My bird born in my mother's tears,
She flies, stretching her wings so,
And from under her wings she drops my mother's message:—
"Come home, Beloved!"

Running out from my mother's bosom my little river,
She suddenly stopped her song
And looking up to the sun,
She in her ripples flashed my mother's message:—
"Come home, Beloved!"

My roses,
My little roses grow in my mother's breath;
They are sad today,
Casting their faces down,
In their petals I read my mother's message:—
"Come home, Beloved!"

(Youe Noguchi, in *National Magazine*.)

In his book "*Kotoro*," in the chapter entitled "After the War," Lafcadio Hearn, who was present at the return of the victorious troops at the close of the war (the Chinese-Japanese War) said to his old servant Manvenon:

"Today you will be in Osaka and Nagoya. You will hear the bugle call and with its appeal you will think of your poor comrades who shall never again see home."

The old man replied with quiet earnestness:

"The people of the West believe, perhaps, that the dead never return. But we think otherwise: the Japanese dead all return, they know the way. From China and from Choisu they will come, and those who rest on the bottom of the sea, they all turn back—all. And when the darkness comes they will assemble together and impatiently await the signal call."

In our last analysis of the Visible we see it is the Beauty and the Beast that has passed before us on the Rialto of life. That which the Great Playwright hath wrought the actors must do—their parts in life are not of their seek-

ing and they cannot escape that from which they would later flee.

Mr. Layton Crippen, a recent reviewer of Mr. Hight's book "*The Unity of the Will*,"* makes himself more conspicuous than the book, that he leads the reader to expect would be presented. If I correctly apprehend the so-called review, the reviewer hides his incompetency under a garb of flippancy. Mr. Crippen is the author of "*Olympus, and Fuji-Yami*" (the Japanese Holy Mountain). He calls his review of Mr. Hight's work "*The Mystery of the Human Will*."

Mr. Hight takes it for granted that the Will is the primary reality; that the intellect is its instrument, and he gives credit to Schopenhauer for being the first philosopher to make this plain. Surely one can object to this contention. Schopenhauer's philosophy was that of Buddha, it was that of Paracelsus, it was that of Jacob Boehme, it was that of the Oriental and Occidental mystics for thousands of years. "For God is but a great will pervading all things by nature of its intentness"—it is not necessary to say whence that quotation is taken.

The sense of the Will inspired the greatest poets of the world; they, like Mr. Hight, feel that "all creation is permeated through and through and animated by an all-ruling Will, which is eternally striving to actualize itself in phenomenal life." This is Mr. Hight's central thought, and his argument is carried forward with a directness, a logic, a careful avoidance of unnecessary technicalities that are admirable. When it is said that on reading the work one fails to find a page that is superfluous it will be evident that even to give a bare outline of the thought in a brief review would be impossible. Here are one or two sentences from the chapter that takes its title from the title of the book, which will give some help to a realization of the idea:

"A miraculous force is seen welling up from the depths of nature, shaping, adjusting, creating; whether we call it "vital force" or "psychical law" matters very little; that

**The Unity of the Will. Studies of an Irrationalist.* By George Ainslie Hight. New York: E. P. Dutton & Co. \$3.

depends upon our own individual standpoint, but the important thing is that it is one, and is tending to one end through all the varied means, through adaptation, strife, failure, better adjustment, and final survival of the fittest; often failing and again beginning with renewed effort till the end is gained. No one can see the will; but what if does we see, and if it cease the action also will cease. Our consciousness, the onlooker, shows it as a judge, or referee, allowing or disallowing, but taking no part in the action, only using physical causality as the instrument of its projection into objectivity. Every action is possible to the will; it is all-creative; as every pattern is possible to the lacemaker sitting with her bobbins before her, and weaving, by simple movement of one thread and another, just that web which she desires; as all literature is open to the typewriter, who produces the sentences he wishes for by touching the levers in turn, never breaking the causal sequence, but simply pressing or abstaining. Thus do the varied causal actions of the Universe lie ready before the will to allow or disallow as it pleases; the levers are in position, and as it presses with the mechanism of a human brain now one and then another of them, as it reacts mechanically to an impression, or lays it by for the future, furnishes or withholds a supply to meet a demand, so it brings forth the harmony of active life. For that harmony which enables each thing to fulfill its functions among others around it, which makes it appear as if designed to fulfill a purpose, that, and not the material composition of its substance, is its true being."

Such, briefly and quite inadequately suggested in this review, is the main idea of Mr. Hight's book. But there is another purpose in the work—a purpose to which the development of this main idea is perhaps only incidental in the author's mind. "The Unity of Will" is a bitter, powerful attack on modern science. In grave words, Mr. Hight warns civilization of the peril, which in his opinion, threatens it:

"Science now assumes the control of civilization, as once did theology, and its career will be the same. Will any

one deny that rationalist science commits the sophistry of seeking to prove and disprove by words alone things for which no data exist, that it assumes artificial concepts of things unknown, or that logical theory in upholding the supremacy of reason abets it therein? A glance at any academic journal will show what our universities understand by knowledge. Questions are discussed which never can be answered; views expanded which never can be tested, because they deal with things long passed away and unverifiable; "authority" means the opinion of one who has read most of the opinions of others, and this is called erudition. * * *

"It will doubtless be urged that there is nothing in modern science to contradict the existence of an unseen world; the evidence for it has often been dwelt upon by scientific writers themselves. Only the two worlds are separate; science merely regards the one as lying beyond her sphere, because to confuse the two would hinder her own special work. "What can be more innocent than agnosticism?" says the follower of science: "I do not choose to say that I know what I do not know." It is not the modest confession of ignorance that one wishes to find fault with, but the aggressive, intolerant attitude which science adopts towards those who go elsewhere than to her for inspiration; who choose other methods than those which she prescribes; her aggressive controversies, made to rest upon words for things which do not exist, such as the word miracle. If to think that what is wonderful must be the work of God be a thing so dreadful that the whole artillery of science must be brought to destroy it, then Heaven help us, for we all think it!"

I do not understand that the author considers the "Mystery of the Human Will," but, rather the question, whether there is to be seen evidence of the Supreme Will of an Intelligent Designer; who has ordained and instituted a Plan and left the details of the operation, indifferent towards the fates of individuals—in which case there exists no mystery of the human will—for human will does not exist.

My view of the Plan is quite definite, and, I believe, consistent in all its parts.

It has come to be admitted that Nature is Energy. But energy and force are confusedly used. Let me present the following: Force is localized Energy. Under that formula, Unity is seen. The diffused heat and light of the sun is localized as to results of animate and still life on earth according to soil, latitude, altitude. It is the Plan with which we come in contact; the Plan that we can in a small degree, as to its relation to our daily fortunes, get a glimpse of. But its Creator we are not permitted to approach. Before the Great Unknown we can only grovel and cry: O, God where art thou! Why go so far afield? We are not wanted there until the ultimate is reached. Looking and longing we are no more advanced in the knowledge of God than is the dullest or the wickedest savage. All that is refined and pleasant in this communal life of men has been wrested from the brutality of nature in the efforts of man to construct ethics and codes for the protection of himself and his posterity. Let man apply himself to *work*, and pass theory.

To some extent (perhaps wholly) I continue the thoughts dimly expressed, evoked by the "review" or notice of Dr. Hight's book "Unity of the Will."

It is the "work" of the world in which each human atom is individually engaged without the slightest will of his or her own. It is the evidence of involuntary "Natural Selection." To me (if I may not be deemed as making myself too prominent) has come the joy of unmasking (from my experience) the duplicity of the Divine Order of things. To me it is in addition to the humanity of my profession, its solaces, etc., the war upon Japanese monstrosity, and the enlightenment for the social system, as to what is coming against them, and as to which, the West, in its Christian altruism and egotism it is surely coming in contact. Professor Cook's Evolution (Kinetic) in man (see *Relation of Man to Nature* [Medical Fortnightly] by myself) involves kinetic *de*volution: and the agents on each side are as involuntary as are the seeds of food, or of famine that are wafted over the face of the earth by the airs of Heaven.

If sentience to some degree exists in everything (as some horticulturists have come to assert, and as Haeckel in his "Insulinde" as to particular vegetable growth suggests experimentally), can the green and later rich and glowing grain have altruistic satisfaction at the contemplation of the process that it must undergo in its mission towards the amelioration of the life of contemporaries, all looking under the belief (*and truth*) of a Divine Plan for a glorious outcome *for all* millions of years hence? It is against this egregious Fallacy that I protest—a Fallacy because in no relation except that of the Unknown is it tolerated.

It may be (and is) said that the universality of such a belief or trust or hope (with its varied and often grotesque expressions) is an indication of the probable benign purpose. But, what is benignity *in futuro*? Bah! It is but a word with which to conjure. It is the juggler's trick. Suppose we assume confidently that it is of serious import, leading towards and finally to, a substantiality. Shall I, for instance, be content; shall I, for instance, roll my vicarious blood as a sweet morsel under my tongue, and die with the contorted face of agony, content to have it interpreted by the favored onlookers as the smile of rapture? No! Ever No! That which is not just between man and man, is not just between God and man. I stand for a "square deal" and for it I will stand ever while on earth, as between God and myself, I fear not.

Under what is called The Divine Plan, what is Life except a play of Harpies? What is the preaching of the pulpit except a gloze, or a shiny glaze, upon the surface of a treacherous interior, of God ordained?

What does that gloze, or glaze, except to conceal the devilishness of the system? What system? The System Divine. What mortal can successfully contend against it? Not one. Shall it be further insisted that Christ (of the Occidentals) was the Son of God, sent to redeem the world and bring it back to God, when surely as the sun will continue to rise day after day, Orientalism in its hideous features will come out and make hold upon and pervert that from which it has been hoped the world was free—

the New World? Indeed, that which was known only sub-rosa (of Japanese, for instance).

Yet only by such laying bare can the world be forewarned. The discouraging feature is that while the "Divine Plan" will thus (hopedly) exterminate the Evil by showing the Japanese the quality of their fancies, thousands upon thousands of the anti-pathetics will themselves become victims.

This is the devilishness of the Natural Law, the law of God. It is the devilishness of our Occidental God Himself if God there be.

These be temperate and sober words, and by them I will stand. I feel an earnestness I cannot suppress.

Omar Khay-Yham asks God "to man's forgiveness give—and take."

God, I make bold to say, is to be pardoned; it is not for Him to pardon man.

And *such is the lesson of the Story of Eden*. The Kaiser of Germany was right in warning the people of Europe to preserve their "highest treasures". ("Volken Europas, wahret eure hochsten Güten." Wilhelm II).

But what does it mean except bloody war or heart-rending silence? Doctors and Reverends, out with the sickly sentimental idea of God and Heaven! Let us teach what God is as developed by His contact with the face of the earth; let us no longer conceal His "true inwardness." Let us take the Proverbs of Solomon, and hang them upon the walls of our dwellings, of our schools, of our lecture rooms. *Let us be a serious people*. Let us do away with sickly namby-pamby pulpit-pratings, or pulpit-platitudes and pretences. *Let us have common sense*. When the son takes up the catechism and reads a page of questions and answers, and looks at his father and says: "Do you believe that?" and the father makes no reply; and the boy says: "If you do not believe it, how can I?" and shuts the book and leaves the room never to open that book again, what has been the result of that Church nonsense except to put the child wholly at the mercy of the world *as it is*, which is not the world that the goody-goody gush has poured into his ears.

We know that "The System" is such a tangled web that in the warp and the woof, good and evil are inextricably mixed. *Let us say so.* The responsibility is with God *Almighty.* *Man is to be blamed for nothing.* As I have frequently pointed out, pagan and immoral Japan has become the *bete-noire* of the modern civilized world. Herein is to be found again, as always, the aggravation inflicted upon mankind.

But all this lament, and energy of thought is but waste. All is naught, joy and jest: travail and tears: the old, old story.

All crime is the crime of Nature against man and mankind. But man, the individual, takes upon himself the blameworthiness for the result.

Let us be reasonable; let us be as logical as our reasoning powers shall permit.

If we are not responsible for the activity of our brain and tissue cells (as believers in heredity of crime tell us), then are we indeed involuntaries, and are immediately brought to stand with Calvin, who preached that a certain number of infants are born to be damned. He meant a per cent, of course. What difference between him and Karma (the Sanscrit merit and demerit of intelligent existence) as I understand the teaching of Karma? Each presents a continuing Good and a continuing Evil. But in the operation of The Plan the good is not immune against evil, and the work of demolition goes ever on. Here and there Good modifies Evil, and Evil deteriorates Good, where it does not destroy the Good that it attacks. But Good perseveres in reproducing Good, and Evil perpetuates itself. If they are relative terms then indeed is man unfortunate in all his speculations as to a Divine Immaculate, for the Immaculate is not deemed to be in charge of man's welfare on earth. Then our God is not Purity, Goodness and Truth.

Indeed, what fair argumentative ground have we for supposing that we have such a Divine Governor? Man is a product of evolution. His statutory and social laws he has made to protect himself against the great principles acknowledged by Calvin and Karma—the Occidental and the

Oriental. The one is aggressive; the other passive. Extremes meet. Calvin would use fire and sword; Karma would sigh and fold the hands with conviction of utter helplessness. And the one would be as effective as the other.

The Creator is alone responsible for every feature of life.

Two refuges are presented: (1) Faith and the abandonment of Reason; (2) Reason and the abandonment of Faith.

The Rationalist has chosen the latter, and is content. Again extremes meet. When direct opposites come at last to the same point—being the intended and desired destination, then where shall man look for a guide? For a guide to calm?

The Pulpit (a Religion) is best for the many. Religion is an emotion. The members of the congregation encourage each other by the Sunday assembly. The Church must remain. We need it, as a community; as a nation we need it. . . . Rationalism is for the individual. Each is an utility. We must select that which is to each the most useful.

I look upon my underlined declaration in a previous paragraph: "*All Crime is Crime of Nature against Man and Mankind*," as final definitive of all my views (if my views are worthy of consideration); and I give it as a challenge to the world. I look upon it as a Crux, from which is dependent on all sides the spectacle that man is COMPELLED to behold. I have no apology to make for the definition; look upon it only as a form logical that has never before been thus plainly put.

I do not in the slightest sense suggest that any one reply either with or against.

It is my fight; and I believe I shall never be beaten. I am not a "crank." I recognize utilities; and I know society needs utilities.

It is "utility" that makes society useful to individuals, without any dwelling upon the finally utile.

This is not a "kick." It is a period.

(To be continued.)

EROTIC SYMBOLISM.*

BY HAVELOCK ELLIS, M. D.,

Carbos Water, Lelant, Cornwall, England.

There is ample evidence to show that, either as a habitual or more usually an occasional act, the impulse to bestow a symbolic value on the act of urination in a beloved person, is not extremely uncommon; it has been noted by men of high intellectual distinction; it occurs in women as well as men; it must be regarded as within the normal limits of variation of sexual emotion.

The occasional cases in which the urine is drunk may possibly suggest that the motive lies in the properties of the fluid acting on the system. Support for this supposition might be found in the fact that urine actually does possess, apart altogether from its magic virtue embodied in folk-lore, the properties of a general stimulant. In composition (as Masterman first pointed out) "beef tea differs very little from healthy urine," containing exactly the same constituents, except that in beef tea there is less urea and uric acid. Fresh urine—more especially that of children and young women—is taken as a medicine in nearly all parts of the world for various disorders, such as epistaxis, malaria and hysteria, with benefit, this benefit being almost certainly due to its qualities as a general stimulant and restorative. William Salmon's *Dispensatory*, 1678, shows that in the seventeenth century urine still occupied an important place as a medicine, and it entered largely into the composition of *Aqua Divina*.

Its use has been known even in England in the nine-

*Continued from November, 1906.

teenth century.* Bourke brings together a great deal of evidence as to the therapeutic uses of urine in his *Scatalogic Rites*; Lusini† has shown that normal urine invariably increases the frequency of the heart beats.

But it is an error to suppose that these facts account for the urolagnic drinking of urine. As in the gratification of a normal sexual impulse, the intense excitement of gratifying a scatalogic sexual impulse itself produces a degree of emotional stimulation far greater than the ingestion of a small amount of animal extractives would be adequate to effect. In such cases, as much as in normal sexuality, the stimulation is clearly psychic.

When, as is most commonly the case, it is the process of urination and not the urine itself which is attractive, there occurs a symbolism of act and not the fetichistic attraction of an excretion. When the excretion apart from the act provides the attraction, we seem usually to be concerned with an olfactory fetichism. These fetichisms in the case of the excretia, seem to be experienced chiefly by individuals who are somewhat weak-minded, which is not necessarily the case in regard to those persons for whom the act, rather than its product apart from the beloved person, is the attractive symbol.

The sexually symbolic nature of the act of urination for many people is indicated by the fact that Bloch, in enumerating various kinds of indecent photographs, refers to a group which he terms "the notorious *pisseuses*." It is further indicated by several of the reproductions in Fuch's *Erotische Element in der Karikatur*, such as Delorme's "La Necessite n'a point de Loi." (It should be added that such a scene by no means necessarily possesses any erotic symbolism, as we may see in Rembrandt's etching commonly called "La Femme qui Pisse" in which the reflected lights on the partly shadowed stream furnish an artistic motive which is obviously free from any trace of obscenity.) The case in which Krafft-Ebing quotes from Maschka of a

*Masterman, *Lancet*, 2 Oct. 1880; R. Neale, *Urine as a Medicine*, "Practitioner," Nov. 1881.

†*Archivio di Farmacologia*, fasos 19-21, 1893.

young man who would induce young girls to dance naked in his room, to leap, and to urinate in his presence whereupon seminal ejaculation would take place in himself is a typical example of urolagnic symbolism in a form adequate to produce complete gratification.

A case in which the urolagnic form of scatologic symbolism reached its fullest sexual development as a sexual perversion has been described in Russia by Sukhanoff.* A young man of 27, of neuropathic temperament, who when he once chanced to witness a woman urinating, experienced voluptuous sensations. From that moment he sought close contact with women urinating, the maximum of gratification being reached when he could place himself in such a position that a woman, in all innocence, would urinate into his mouth. All his amorous adventures were concerned with the search for opportunities for procuring this difficult gratification. Closets, in which he was able to hide winter weather and dull days, he found most favorable to success.

In a case communicated to me, a young man of aristocratic family, was accustomed to watch the movements of lady guests and, after they had visited their bed-rooms immediately seek and remove to his own room vessels containing freshly voided urine. One day he was met by a lady who unexpectedly returned to the room she had just left. He was placed under medical observation, but was undoubtedly sane.

In the apparently similar case of a robust man of neuropathic heredity recorded by Pelanda, there was masturbation up to the age of 16, when he abandoned the practice and, up to the age of 30, found complete satisfaction in drinking the still hot urine of women. When a lady or girl in the house went to her room to satisfy a need of this kind, she had hardly left it but he hastened in, overcome by extreme excitement, culminating in spontaneous ejaculation. The younger the woman the greater the transport he experienced. It is noteworthy that i

**Archives d' Anthropologie Criminelle*, Nov. 19, and *Annales Médico-psychologiques*, February, 1901.

†A somewhat similar case is recorded in the *Archives de Neurologie*, 1902, p. 40.

is, as possibly in all similar cases, there was no sensory perversion and no morbid attraction of taste or smell; he stated that the action of his senses was suspended by his excitement, and that he was quite unable to perceive the color or taste of the fluid.* It is in the emotional symbolism that the fascination lies, and not in the sensory perversion.

Magnan† records the spontaneous development of this sexual symbolism in a girl of eleven, of good intellectual development but alcoholic heredity, who seduced a boy younger than herself to mutual masturbation, and on one occasion lying on the ground and raising her clothes asked him to urinate on her. This case (except for the early age of the subject) is a fairly typical example of a sporadically occurring urolagnic symbolism in a woman, to whom such symbolism is fairly obvious on account of the close resemblance between the emission of urine and the ejaculation of semen in the man, and the fact that the same conduit serves for both fluids.‡ A urolagnic day-dream of this kind is recorded in the history of a lady contained in Appendix B. History. The natural inevitable character of this symbolism is shown by the fact that among primitive peoples urine is sometimes supposed to possess the fertilizing virtues of semen. J. G. Frazer§ brings together various stories of women impregnated by urine. Hartland|| also records legends of women impregnated by accidentally or intentionally drinking urine.

The symbolic sexual significance of urolagnia has hitherto usually been confused with the fetichistic and mainly olfactory perversion by which the excretion itself becomes a source of sexual excitement. Long since Tardieu referred, under the name of "renifleurs," to persons who were said to haunt the neighborhood of quiet passages, more especially in the neighborhood of theatres, and who when they per-

*"Pornopatici," *Archivio di Psichiatria*, fasc. 111-iv., 1889, p. 356.

†International Congress of Criminal Anthropology, 1889.

‡*Psychology of Sex*, Vol. III.

§Pausanias, Vol. IV, p. 139.

||*Legend of Perseus*, Vol. I, pp. 76, 92.

ceived a woman emerge after urination, would hasten to excite themselves by the odor of the excretion. Possibly a fetichism of this kind existed in a case recorded by Belletrud and Mercier; a weak-minded, timid youth who was very sexual but not attractive to women, would watch for women who were about to urinate and immediately they had passed would go and lick the spot they had moistened, at the same time masturbating. Such a fetichistic perversion is strictly analogous to the fetichism by which woman's handkerchiefs, aprons or underlinen became capable of affording sexual gratification. A very complete case of such urolagnic fetichism—complete because separated from association with the person accomplishing the act of urination—has been recorded by Moraglia in a woman. It is the case of a beautiful and attractive young woman of eighteen, with thick black hair, and expressive, vivacious eyes, but sallow complexion. Married a year previously but childless, she experienced a certain amount of pleasure in coitus but she preferred masturbation, and frankly acknowledged that she was highly excited by the odor of fermented urine. So strong was this fetichism that when, for instance, she passed a street urinal she was often obliged to go aside and masturbate; once she went for this purpose into the urinal itself and was almost discovered in the act, and on another occasion into a church. Her perversion caused her much worry because of the fear of detection. She preferred, when she could, to obtain a bottle of urine—which must be old and a man's (this, she said, she could detect by the smell)—and to shut herself up in her own room, holding the bottle in one hand and repeatedly masturbating with the other.† This case is of especial interest because of the great rarity of fully developed fetichism in women. In a slight and germinal degree I believe that cases of fetichism are not uncommon in women, but they are certainly rare in a well-marked form, and Krafft-Ebing declared, even in the late editions of his *Psychopathia Sexualis*, that he knew of no cases in women.

*Annales d'Hygiene Publique, June 1904, p. 48.

†Archivio di Psichiatria, (Vol. XIII, fasc. 6, p. 267, 1892.)

So far we have been concerned with the urolagnic rather than the coprolagnic variety of scatological symbolism. Although the two are sometimes associated there is no necessary connection and most usually there is no tendency for the one to involve the other. Urolagnia is certainly much the more frequently found; the act of urination is far more apt to suggest erotically symbolical ideas than the idea of defecation. It is not difficult to understand why this should be so. The act of urination lends itself more easily to sexual symbolism; it is more intimately associated with the genital function; its repetition is necessary at more frequent intervals so that it is more in evidence; moreover its product is much less offensive to the senses than that of the act of defecation, and the act of urination has sometimes furnished a motive to the painter. Still coprolagnia occurs and not so very infrequently, Burton remarked, that even the normal lover is affected by this feeling: "*immo nec ipsum amicae stercus foetet.*"* Of Caligula who, however was scarcely sane, it was said "*et quidem stercus uxoris degustavit.*" In Parisian brothels (according to Taxil and others) provision is made for those who are sexually excited by the spectacle of the act of defecation† (without reference to contact or odor) by means of a "*tabouret de verre,*" from under the glass floor, from where the spectacle of the defecating women may be closely observed. It may be added that the pleasure of such a spectacle is referred to in the Marquis de Sade's novels. The stercoraires are described by Borouordel as watchers of women's urinals.

There is one motive for the existence of coprolagnia which must not be passed over because it has doubtless frequently served as a mode of transition to what, taken by itself, may well seem the least aesthetically attractive of erotic symbols. I refer to the tendency of the nates to become a sexual fetich. The nates have in all ages and in all parts of the world been frequently regarded as one

**Anatomy of Melancholy*, Part 111, Sect. 11, Mem. 111, Subs. 1.

†*Gazette des Hopitans*, 1888.

of the most aesthetically beautiful parts of the feminine body.* It is probable that on the basis of this entirely normal attraction more than one form of erotic symbolism is at all events in part supported. Dühren and others have considered that the aesthetic charm of the nates is one of the motives which prompt the desire to inflict flagellation on women. In the same way—certainly in some and probably in many cases—the sexual charm of the nates progressively extends to the anal region, to the act of defecation, and finally to the excreta.

It may be remarked that while the eating of excrement (apart from its former use and as a magic charm and as a therapeutic agent) is in civilization now confined to sexual perverts and the insane, among some animals it is normal as a measure of hygiene in relation to their young. Thus, as, *e. g.* the Rev. Arthur East writes, the mistle thrush swallows the droppings of its young.† In the dog I have observed that the bitch licks her puppies shortly after birth as they urinate, absorbing the fluid.

In a case of Krafft-Ebing's the subject, when a child of six, accidentally placed his hand in contact with the nates of the little girl who sat next to him in school and experienced so great a pleasure in this contact that he frequently repeated it; when he was ten a nursery governess to gratify her own desire placed his finger in her vagina; in adult life he developed urolagnic tendencies.

In a case of Moll's the development of a youthful admiration for the nates in a coprolagnic direction may be still more clearly traced. In this case a young man, a merchant in a good position, sought to come in contact with women defecating; and with this object would seek to conceal himself in closets; the excretal odor was pleasurable to him but was not essential to gratification, and the sight of the nates was also exciting and at the same time not essential to gratification; the act of defecation appears, however, to have been regarded as essential. He

*See, *e. g.* the previous volume of these *Studies*, "Sexual Selection in Man," pp. 165 *et seq.*, and Dühren, *Geschlechtsleben in England*, Bd. II, pp. 258 *et seq.*

†Knowledge, June 1, 1892.

never sought to witness prostitutes in this situation; he was only attracted to young, pretty and innocent women. The coprolagnia here, however, had its source in a childish impression of admiration for the nates. When five or six years old he crawled under the clothes of a servant girl, his face coming in contact with her nates, an impression that remained associated in his mind with pleasure. Three or four years later he used to experience much pleasure when a young girl cousin sat on his face; thus was strengthened an association which developed naturally into coprolagnia.*

It is scarcely necessary to remark that an admiration for the nates, even when reaching a fetichistic degree, by no means necessarily involves, even after many years, any attraction to the excreta. A correspondent for whom the nates have constituted a fetich for many years writes: "I find my craving for women with profuse pelvic or posterior development is growing and I wish to copulate from behind; but I would feel a sickening feeling if any part of my person came in contact with the female anus. It is more pleasing to me to see the nates than the mons, yet I loathe everything associated with the anal region."

Moll has recorded in detail a case of what may be described as "ideal coprolagnia—that is to say, where the symbolism, though fully developed in imagination, was not carried into real life—which is of great interest because it shows how in a highly intelligent subject the deviated symbolism may become highly developed and irradiate all the views of life in the same way as the normal impulse. (The subject's desires were also inverted but from the present point of view the psychological interest of the case is not thereby impaired.) Moll's case was one of symbolism of act, the excreta offering no attraction apart from the process of defecation. In a case which has been communicated to me there was, on the other hand, an olfactory fetichistic attraction to the excreta even in the absence of the person.

In Moll's case, the patient X, twenty-three years of

*Untersuchungen uber die Libido Sexualis, Bd. 1, p. 837.

age, belongs to a family which he himself describes as nervous. His mother, who is anaemic, has long suffered from almost periodical attacks of excitement, weakness, syncope and palpitation. A brother of the mother died in a lunatic asylum and several other brothers complain much of their nerves. The mother's sisters are very good-natured but liable to break out in furious passions; this they inherit from their father. There appears to be no nervous disease on the patient's father's side. X's sisters are also healthy.

X. himself is of powerful, undersized build and enjoys good health, injured by no excesses. He considers himself nervous. He worked hard at school and was always the first in his class; he adds, however, that this is due less to his own abilities than the laziness of his school-fellows. He is, as he remarks, very religious and prays frequently, but seldom goes to church.

During his school-days he had periodic fits of depression and misanthropic depression. He refers also to his extreme pedantry at this period. These fits are now much less marked. In society he is not communicative.

In regard to his psychic character he says that he has no specially prominent talent, but is much interested in languages, mathematics, physics and philosophy, in fact in abstract subjects generally. "While I take a lively interest in every kind of intellectual work," he says, "it is only recently that I have been attracted to real life and its requirements. I have never had much skill in physical exercises. For external things, until recently, I have only had contempt. I have a delicately constituted nature, loving solitude, and only associating with a few select persons. I have a decided taste for fiction, poetry and music; my temperament is idealistic and religious, with strict conceptions of duty and morality and aspirations towards the good and beautiful. I detest all that is common and coarse, and yet I can think and act in the way you will learn from the following pages."

Regarding his sexual life X has made the following

communication: "During the last two years I have become convinced of perversion of my sexual instinct. I had often previously thought that in me the impulse was not quite normal, but it is only lately that I have become convinced of my complete perversion. I have never read or heard of any case in which the sexual feelings were of the same kind. Although I can feel a lively inclination towards superior representatives of the female sex, and have twice felt something like love, the sight or the recollection even of a beautiful woman have never caused sexual excitement." In the two exceptional instances mentioned, it appears that X. had an inclination to kiss the women in question, but that the thought of coitus had no attraction. "In my voluptuous dreams, connected with the emission of semen, women in seductive situations have never appeared. I have never had any desire to visit a harlot. The love stories of my fellow-students seemed very silly, dances and balls were a horror to me, and only on very rare occasions could I be persuaded to go into society. It will be easy to guess the diagnosis in my case: I suffer from the sexual attraction of my own sex, I am a lover of boys.

"You cannot imagine what a world of thoughts, wishes, feelings and impulses the words 'Knabe,' 'garçon,' 'boy,' 'ragazzo' have for me; one of these words, even in an unmeaning clause of the translation-book, calls before me the whole sum of associations, which in course of time have become bound up with this idea, and it is only with an effort that I can scare away the wild band. This group of thoughts shows a wonderful mixture of warm sensuality and ideal love; it unites my lowest and highest impulses, the strength and weakness of my nature, my curse and my blessing. My inclination is especially towards boys of the age of 12 to 15; though they may be rather younger or older. That I should prefer beautiful and intelligent boys is comprehensible. I do not want a prostitute, but a friend or a son, whose soul I love; whom I can help to become a more perfect man, such as I myself would willingly be.

"When I, myself, belonged to that happy age (*i. e.* be-

low 15) I had no dearer wish than to possess a friend of similar tastes. I have sought, hoped, waited, grieved, and been at last disillusioned, overcome by desire and despair, and have not found that friend. Even later the hope often reappeared, but always in vain, and I cannot boast of that sure recognition which one reads of in the autobiographies of Urnings. I do not know personally a single fellow-sufferer. It is also doubtful whether such an acquaintance-ship would greatly help me, for I have a very peculiar conception of homosexuality. As you will see, I have little more in common with what are called pæderasts, than sexual indifference to the female sex, and I often ask myself: 'Does any other man in the whole world feel like you? Are you alone in the earth with your morbid desires? Are you a pariah among pariahs, or is there perhaps another soul with similar longings living near you?' How often in summer have I gone to the lakes and streams outside cities to seek boys bathing; but I always came back unsatisfied, whether I found any or not. And in winter I have been irresistibly impelled to return to the same 'spots as if it were sanctified by the boys, but my darlings had vanished and cold winds blew over the icy floods, so that I would return feeling as though I had buried my happiness.

"It must be borne in mind, therefore, that what I have to say regarding my sexual impulses only refers to fancies and never to their practical realization. My sensual impulses are not connected with the sexual organs; all my voluptuous ideas are not in the least connected with these parts. For this reason I have never practiced onanism and *immissio membri in anum* is repulsive to me as to normal man. Even every imitation of coitus is, for me, without attraction. In a boy's body two things especially excite me: *his belly and his nates*, the first as containing the digestive tract, the second as holding the opening of the bowels. Of the vegetable processes of life in the boy, none interest me nearly so much as the progress of his digestion and the process of defecation. It is incredible to what an ex-

tent this part of physiology has occupied me from youth. If, as a boy, I wanted to read something of a piquantly exciting character, I sought in my father's encyclopaedia for articles like: Obstruction, Constipation, Haemorrhoids, Faeces, etc. No function of the body seemed to be so significant as this, and I regarded its disturbances as the most important in the whole mechanism of life. The description of other disorders I could read in cold blood, but intussusception of the bowels makes me ill even to-day. I am always extremely pleased to hear that the digestion of people around me is in good condition. A man who did not sufficiently watch over his digestion aroused distrust in me and I imagined that wicked men must be horribly indifferent regarding this weighty matter. Even more than in ordinary persons was I interested in the digestion of more mysterious beings, like magicians in legends, or men of other nations. I would willingly have made an anthropological study of my favorite subject, only to my annoyance books nearly always pass over the matter in silence. In history and fiction I regretted the absence of information concerning the state of my heroes' digestion when they languished in prison, or in some unaccustomed or unhealthy spot. For this reason I held no book more precious than the one which describes how a young man, after being shipwrecked, lived for a long time in a narrow snow-hut, and it was conscientiously stated that he became conscious of digestive disturbances. No immorality angers me more than the foolish practice of ladies who in society neglect the satisfaction of their natural needs from misplaced motives of modesty. On a railway journey I suffer horribly from the thought that one of my fellow-travellers may be prevented from fulfilling some imperative natural necessity.

"I naturally devote the greatest attention to my own digestion. With painful conscientiousness I go to stool every day at the same hour; if the operation does not come off to my satisfaction, I feel not so much physical as mental discomfort. To this quite useful hygienic interest became associated at puberty a sensual interest. Since

my fourteenth year I have had no greater enjoyment than to defecate undressed (I do not do so now) after having first carefully examined the distention of my abdomen. In summer I would go into the woods, undress myself in a secluded spot and indulge in the voluptuous pleasures of defaecation. I would sometimes combine with this a bath in a stream. I would exhaust my imagination in the effort to invent specially enjoyable variations, longed for a desert island where I could go about naked, fill my body with much nourishing food, hold in the excrement as long as possible, and then discharge it in some subtly thought-out spot. These practices and ideas often caused erections and later on emissions, but the genitals played no part in my conceptions; their movements were uncomfortable and gave no pleasure.

"I soon longed to be associated in these orgies with some boy of the same age, but I wanted not only a companion in my passion but also a real friend. Since there could be no question of masturbation or paedicatis, our love would have been limited to kisses, embraces, and—as a compensation for coitus—defaecation together. That would have been perfect bliss to me. I will spare you the unaesthetic contents of my voluptuous dreams. But I remained without a companion and therefore without real enjoyment. (He has, however, on various occasions, experienced erections, and even emissions, on seeing by chance men or boys defaecate.) *Hinc illae lacrimae*, the excitement over my own defaecation, only took place *faute de mieux*.

"I knew very well that my thoughts and practices were impure and contemptible. Ah! how often, when the intoxication was over, have I thrown myself remorsefully on my knees, praying to God for pardon! For some weeks I repressed my longing; but at last it was too strong for me, I tried to justify myself and fell into my vice anew. That I was guilty of licentiousness and loved boys sexually first became clear to me later on, when I knew the significance of erection as a sign of sexual excitement.

"No one can imagine with what demoniacal joy I am possessed at the thought of a beautiful naked boy whose abdomen is filled as the result of long abstinence from stool. The thought powerfully excites me, a flood of passion goes through my blood and my limbs tremble. I never would grow tired of feeling that belly and looking at it. My passion would express itself in tempestuous caresses, and the boy would have to assume various positions in order to show off the beauty of his form, *i. e.*, to bring the parts in question into better view. To observe defaecation would still further increase this peculiar enjoyment. If the boy's bowels were not sufficiently filled I would feed him with all sorts of food which produces much excrement, such as potatoes, coarse bread, etc. If possible I would seek to delay defaecation for two or three days, so that it might be as copious as possible. When at last it occurred, it would be an unspeakable joy for me to watch the dung—which would have to be fairly firm—emerging from the anus."

X. would like to be a teacher and thinks he could exert a beneficial influence on boys. In spite of the pain he has suffered, he does not think he would like to be cured of his perverse inclinations, for they have given him joy as well as pain, and the pain has chiefly been owing to the fact that he could not gratify his inclinations. X. smokes and drinks in moderation and has no feminine habits.*

The case of coprolagnia communicated to me is that of a married man, normal in all other respects, intellectually brilliant and filling successfully a very responsible position. When a child the women of his household were always indifferent as to his presence in their bedrooms and would satisfy all natural calls without reserve before him. He would dream of this with erections. His sexual interests became slowly centered in the act of defaecation, and his fetich throughout life never appealed to him so powerfully as when associated with the particular type of household

*Moll, *Konträre Sexualempfindung*, 3rd ed. p

furniture which was used for this purpose in his own house.

The act of defaecation in the opposite sex, or anything pertaining to or suggesting the same, caused uncontrollable sexual excitement; the nates also exerted a great attraction. The slime excreta exerted this influence even in the absence of the woman; it was, however, necessary that she should be a sexually desirable person. The perversion in this case was not complete; that is to say that the excitement produced by the act of defaecation, or the excretion itself, was not actually preferred to coitus, the sexual idea was normal coitus in the normal manner, but preceded by the visual and olfactory enjoyment of the exciting fetic. When coitus was not possible, the enjoyment of the fetic was accompanied by masturbation (as in the analogous case of urolagnia in the woman summarized.) On one occasion he was discovered by a friend in a bedroom belonging to a woman, engaged in the act of masturbation over a vessel containing the desired fetic. In an agony of shame he begged the mercy of silence concerning this episode, at the same time revealing his life-history. He has constantly been haunted by the dread of detection, as well as by remorse and the consciousness of degradation, also by the fear that his unconquerable obsession may lead him to the asylum.

The scatologic groups of sexual perversions, urolagnic and coprolagnic, as may be sufficiently seen in this brief summary, are not merely olfactory fetiches. They are in a larger proportion of cases dynamic symbols, a preoccupation with physiological acts, which by associations of contiguity and still more of resemblance, have gained the virtue of stimulating in slight cases and replacing in more extreme cases the normal preoccupation with the central physiological act itself. We have seen that there are various considerations which amply suffice to furnish a basis for such associations. And when we reflect that in the popular mind, and to some extent in actual fact, the sexual act is like urination and defaecation, an excretory

act, we can understand that the true excretory acts may easily become symbols of the pseudo-excretory act. It is indeed in the muscular release of accumulated pressures and tensions, involved by the act of liberating the stored-up excretion, that we have the simulacrum of the tumescence and detumescence of the sexual process.*

In this way the erotic symbolism of urolagnia and coprolagnia is perfectly analogous with that dynamic symbolism of the clinging and swinging garments, which Herrick has so accurately described, with the complex symbolism of flagellation and its play of the rod against the blushing and trembling nates, or with the symbols of sexual strain which are embodied in the foot and the act of treading.

(To be concluded.)

*In the study of *Love and Pain* in a previous volume (p. 130) I have quoted the remarks of a lady who describes the analogy between sexual tension and vesical tension. "Cette volupté que ressentent les bords de la mer, d'être toujours pleins sans jamais déborder"—and its erotic significance.

NEURONES IN THE LIGHT OF OUR PRESENT KNOWLEDGE.

By JOSEPH COLLINS, M. D.,

NEW YORK.

Professor of Neurology at the New York Post-Graduate Medical
School and Hospital,

and

EDWIN G. ZABRISKIE, M. D.,

NEW YORK.

Instructor in Neurology at the New York Post-Graduate Medical
School and Hospital.

TEN years ago the "Neuron theory," *i. e.* the theory that the nervous system was made up of a collection of anatomical and genetic nerve entities or units constituted of cell, fiber and terminal ramifications, having no connection save by contiguity, was generally accepted. In 1891, Waldeyer, the Berlin anatomist, set forth the idea of the neuron based largely upon the conception of Gerlach and Deiters and upon work that had been done by means of the Golgi and Cajal methods of staining, which, as is well known, reveal particularly the outlines of nerve cells. He maintained that nerve fibers are collections of axis cylinders which emerge directly from nerve cells, that there is no relationship to a fiber network at the point of origin, and that all nerve fibers end free in terminal ramifications without anastomosis or network formation of any kind. The neuron theory seemed entirely to harmonize with the cell theory, and the application of it to the problems of neuropathology seemed to divest many of them, particularly the systemic and combined systemic diseases, of their obscurities. In

short, it appeared to harmonize so well with physiological, histological, and pathological teachings that it soon became almost universally accepted. It is not our purpose to call particular attention to the wide application of the neuron theory to clinical medicine and to psychology, nor to the fact that in some instances it has been carried to an absurd degree.

Gradually in latter years an increasing interest has developed in the histology and microchemistry of the nervous system; and with this has come from many workers in these fields a decided opposition to the neuron theory so that to-day it is in the strict sense partially or wholly rejected by many of the most trustworthy workers in the fields of neurohistology and biology. Apathy, Bethe, Nissl, and others have sought to establish that the fibrils of nerve cells form a continuous system, without beginning, without end, like the vascular system, binding one cell body with another and thus uniting the neurons between them. Without in any sense holding a brief for those who oppose the neuron theory, we propose briefly to review some of the more important evidence that now exists to show that the nervous system is not made up of a collection of units, of invariable constitution with free endings, having no connection with one another save by contiguity, and to attempt a judgment of the evidence thus reviewed.

The temporal evolution of our knowledge of the nervous system falls into periods. The work that was done from 1835 to 1885—fifty years—and the work that has been done since 1885—twenty years.

After the discovery of the nerve cells by the zoologist Ehrenberg, and the study of them by Valentin, Purkinje, Wagner, and others, it was demonstrated by Deiters that nerve cells were made up of a cell-body and prolongations, protoplasmic and axis-cylinder prolongations, unlike in structure and behavior; the former being of the same constitution as the cell, split up soon after their origin, and terminate not far from the cell. The latter, of much more compact structure, were directly continuous, Deiters maintained, as nerve-fibers.

When Remak depicted axis-cylinders, or, as he called them, the "primitive bundles," he described them as finely-striated structures, but not distinctly fibrillated as did Fromann in 1864. The latter depicted fine fibrillary striations in the cells of the anterior horns and in their protoplasmic prolongations, especially distinct in the latter. The opinion generally held at that time by anatomists was that axis-cylinders or "primitive bundles" were homogeneous in structure and that their peripheral terminations, at least in case of muscle plates, were in ends external to or beneath the sarcolemma.

In 1859 Lionel S. Beale, Professor of Physiology and Pathology in King's College, London (whose death was recently announced,) published an article in the Philosophical Transactions (1860, page 611) in which he maintained that complete nerve circuits existed, *i. e.* that there was no free ending of nerve fibers anywhere. Nerve fibers, he said, passing to a muscle, divide into a vast number of exceedingly fine pale granular fibers which ramify upon the external surface of the sarcolemma, connected with which fibers at certain intervals are oval nuclei; and these fine fibers, after an extensive, and in many cases very circuitous course, join with other fibers to form dark bordered fibers which at length pass toward the nervous center either in the same bundle as the dark bordered fibers passing toward the muscles, or in other bundles.

He prepared tissues for examination by soaking them in or injecting them with some highly refractive fluid such as simple syrup or glycerin to which a little chromic acid had been added. Beale did an enormous amount of work in support of his claims, published various articles, illustrating them with excellent drawings, and offered to demonstrate his specimens to anyone who would take the trouble to look at them. He concluded from his work upon the different tissues of the body that nerve fibers never end or terminate by free extremities, but that in all cases complete circuits exist and that the circuit is the fundamental origin of the nervous apparatus. In other words, his position was.

almost identical with that of those who hold to the neurofibril theory of to-day. Beale was treated with scant courtesy by his contemporaries and apparently even that was accorded to him only because of personal friendship with some of the leading German anatomists. Kühne, Kölliker, Margó, and Engelmann all denied the accuracy of his diagrams and the reality of his descriptions, while some of the French anatomists, notably Rouget, essayed disdainfulness and superiority, saying: "It is easy to assure one's self that the description of Beale is wholly inexact and no time should be wasted upon it by the experienced and attentive observer." Time has shown that Beale was accurate to a degree that can scarcely be believed when one remembers that the only reagents that he worked with were syrup and glycerin. It is largely due to Joris, in his prize essay published by the Belgian Royal Academy of Medicine, "*Nouvelles Recherches sur les Rapports Anatomiques des Neurones*," that attention has been called to the remarkable work of Beale. In the hundreds of articles, monographs, and reviews that have been written on neurons and neurofibrils in the past ten years, Beale's name is not mentioned. For instance, Bethe, in the third chapter of his "*Allgemeine Anatomie und Physiologie des Nervensystems*," says that the fibrillary structure of the nerve cells and its prolongations received its first great impetus from Schultze. In reality Schultze confirmed the discoveries of Beale while demonstrating the existence of isolated nerve fibrils and showing that they were specific elements of the nervous tissue. His article formed a chapter in Stricker's *Handbuch der Gewebelehre*, 1871, which, being the most popular textbook of histology in the German language, was widely read and became very generally known. On the other hand, Beale's articles were published in the *Philosophical Transactions*, a vehicle rarely encountered by German savants, it would seem, and in the *Archives of Medicine*, of which he was editor. His position as a teacher, his membership in the Royal Society, his repute as a master of microscopical technique, apparently did not help him to a serious hearing. That Beale was master of the situation, however, and that

he believed firmly in his findings, can be proven to anyone who will take the trouble to read the article in the *Archives of Medicine*, Volume IV., 1863-1870, entitled "An Anatomical Controversy," in which he deals with those who sat in judgment upon him in a most masterful manner.*

There is no doubt whatsoever that Max Schultze extended Beale's ideas very materially, but Schultze had the advantage of examining cells of tissues that had been hardened in chrome salts, in iodized serum, and in osmic acid and bichromate of potash. Schultze showed that the "primitive bundles," as he called them, constituted the specific structural element of the nervous substance. He demonstrated the distinct fibrillary striations which are entirely independent and parallel both in the protoplasmic and in the axis-cylinder prolongations. He pointed out that the non-medullated fibers split up at the end so as to form a bush-like condition of the finest fibrils. In ganglion cells treated with iodized serum he was able to see the finest striations and to trace these striations through the entire cell from one side where they came in to the other side where they passed out through other prolongations. In other words, he showed to his own satisfaction that the fibrils did not originate in the body of the cell. These discoveries led him to the conclusion that the fibrils were the essential thing in the construction of the nervous system, and that ganglion cells were no more than stations for the fibrils, which stations served to make it possible for fibrils coursing in a prolongation to get into connection with many other prolongations and also with axis-cylinders. His idea was that the nerve fibers were simple fibrillary bundles, and he therefore divided them into two classes—naked fibrillary bundles

*In Vol. V. of the same journal will be found an unsigned article entitled "German Criticism and British Medical Science," undoubtedly from the pen of Dr. Beale, which throws an interesting side light upon the controversy: "It has been said that science is of no nationality. . . . Such dreams must be dispelled; Germany has spoken; the investigation of Nature's minutest and most delicate secrets is *her* prerogative only. Anatomical observations are made in Germany only, and it is not possible to discover any structure elsewhere. Other countries must expect and listen to the story of what she finds. To her alone belongs the right to discover! Nay, it is doubtful if light for microscopical illumination is to be obtained elsewhere."

and fibrillary bundles with medullary sheaths. Despite the fact that this line of investigation was pursued with much success by other investigators, and notably by Kuppfer (who, by the way, Apathy states, was the real discoverer of the neurofibrils, Sitzungsber. d. Naturwissenschaft. Atlas d. Bayerish Acad. d. Wissensch. Med., 1883, page 473,) H. Schultze, Dogiel, Flemming, and many others, it was not until 1897 when Apathy made his contribution entitled "Das Leitende Element des Nervensystems und seine Beziehungen zu den Zellen" (Mittheilungen der zoologischen Station, Neapel, Volume XII.), that neurofibrils began to have an important place in the literature of neurology and histology. In several communications dating back to 1883, he had pointed out the fundamental facts of his observations and conclusions, but these were published principally in the Hungarian language and were unnoticed. In the volume that appeared in 1897 the pen pictures and verbal descriptions were so distinct and comprehensive that at once the matter was given the attention which it demanded. He maintained that the neurofibril is the essential and specific constituent of the nervous system. He had studied in detail the nervous system of the leech by the aid of a method, now well known, which depicted the nerve fibrils with such distinctness that they could be followed from one end of the preparation to the other. These neurofibrils appeared as deep, dark threads on a slightly tinged background, or, as Bethe says, like telegraph wires against a clear sky. On cross-section of sensory or motor fibers they appear as dark spots or small, somewhat spiral lines, indicative of their spiral course.

These neurofibrils were found wherever there was nerve organization, *i. e.* in nerve fibers, in ganglion cells, in sensory epithelial cells, in glandular cells, and in all these tissues they were sharply differentiated. There was no vagueness about their outline, they were well-defined, individual morphological elements and nowhere could an ending of one of the neurofibrils be found. Apathy believed the individuality of the neurofibril, the uninterrupted course, and the endlessness to be its most striking

features. In end organs, such as muscle fibers, sensory epithelial cells, glandular cells, etc., the fibrils interlace so as to form networks. In ganglion cells they seem to terminate in a similar way. The majority of the fibrils which enter ganglion cells through the protoplasmic prolongations of unipolar cells or through the many prolongations of the multipolar cells, interlace in such a fashion as to form a very intricate network. A similar network formation is found in the neuropil (the nerve cell in contradistinction to the ganglion cell), only the very fine network occupying the center of the cell, is made up of very many more fibrils. Conducting primitive fibrils pass into the interior of the ganglion cell, and just as many elementary fibers leave it after the "trellis formation." Termination, dissolution in or connection with the cell nucleus the fibril does not have.

In this conception of Apathy, the neurofibrils either go toward centers and penetrate ganglion cells, or they go toward the periphery and ramify around muscle cells and penetrate sensory or secretory cells. In invertebrates Apathy demonstrated motor fibers which extend from the cell to the muscle to which they go, and sensory fibers very much thinner than the motor which pass into the "elementary trellis" and from there into the cell. Apathy divides the cells of the nervous system into two distinct classes—nerve cells and ganglion cells. The former are analogous to muscle cells; they produce the material that conducts, *i. e.* the material that produces fibrils.

The ganglion cells are interpolated in conductive paths like cells in an electric circuit; they produce that which is to be conducted. In ganglia these ganglion cells are arranged around the periphery and are of two kinds, large and small. Neurofibrils entering the large cells form at once an intramedullary network and from this network new fibrils detach themselves and go out through the same prolongation. Thus a prolongation conducts in two directions. Primitive fibrils may pass through a number of ganglion cells before they enter into the formation of networks. In the prolongation of the

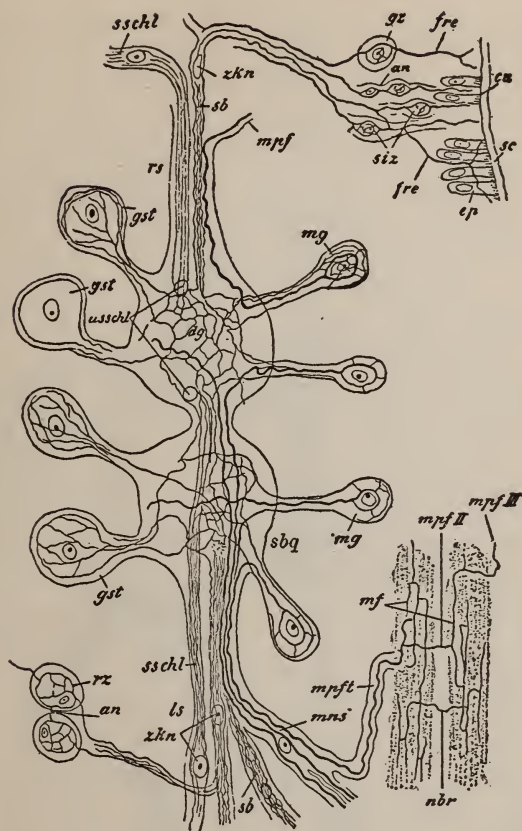


FIG. 1.—Apathy's Schema of course and communication of the conducting pathway in cross-section of a cornute of Hirudo. The two ganglion valves with motor *mg*, and sensory or merely connecting *gst* ganglion cells. The three kinds of nerve spindles or nerve fibers *sb*, *sschl*, *mns*, their arrangement in the center, distribution in the central mass of fibers and connections with the ganglion cells; their arrangement at the periphery: muscle fibers, epidermal and subepidermal sensory cells with their terminal branching in its epidermis (*fre*), *usschl* where a sensory tube *sbq*, where a sensory bundle curves into the central mass of fibers in a longitudinal direction, *mbe* conducting bridges between muscle fibers. We see from the upper right the perceptive sensory surface, the centripetal conducting febril path, which enters into the elementary gutter and thence in the ganglion cell and its mesh work. Thicker fibers which later become united in bundles as the motor nerves pass from the motor ganglion cells to muscle (lower right) and branch in the manner already described.—(From Hartmann, "Die Neurofibrillenlehre.")

small cells there is to be found an individual fiber which is characterized by its considerable volume: this is the motor fiber. All fibrils coming out from ganglion cells enter the formation of a common network occupying the center of



Fig. 2.—B elementary network of Golgi net, from which the neurofibrils develop and pass into the cell. The same at M N with the fibrile. L elementary fibers passing from the nervous gray into the Golgi net. A nervous gray; C axone hillock without Golgi net. X axone; H myeline sheath; I K connection of axone with nervous grey after Nissl.

the ganglion. This common network is the "elementar gitter" of Apathy, or, as it may be translated, elementary trellis or screen. In some instances fibrils come directly from the cell without passing through this central network.

At the periphery of the body there is a very similar disposition of the nervous element. The neurofibril forms in the secretory cell an intracellular network, whose branches leave the cell and anastomose with fibrils coming from neighboring cells to form intercellular networks.

In 1896 the teachings of Apathy were accepted by Bethe, who confirmed his findings in invertebrates by the use of other methods of investigation. Extending Apathy's conception, Bethe attempted to show that in the phylogenetic development of animal life, so called plasmatic nerve-nets constitute the lowest method of connection of nerve cells. The fibrils of these plasmatic networks form only the intercellular trellis which constitutes the direct connection between the peripheral sensorium and the muscles. In the nervous system of all higher animals there occurs somewhere a mixture of the fibrils coming anywhere from the surface which make up the fibril trellises, and, according to Bethe, it is the position of this trellis which constitutes the difference between the different forms.

As we ascend in the scale of the vertebrates we find that the fibril gets more and more outside the cell, until finally it gets entirely out between the cells, so that according to Bethe's view, within cells fibrils merely pass through having no more intimate relation than that caused by such passing. Either the fibril trellises remain near each other and have long pathways to receptory and effector organs, or long pathways form between remote fibril trellises. Recent work done according to the methods of Cajal and Bielchowsky seems to corroborate in general Bethe's opinions, but it is difficult to obtain reliable information of the fibrils in central cells with these methods. Apathy maintains that there is an intercellular trellis formation in vertebrates. Hartmann (*Die Neurofibrillenlehre*, Braumüller, Vienna and Leipzig, 1905) is inclined to accept this inasmuch

as his preparations showed that a part of the fibrils which pass into many ganglion cells have a trellis formation which, in the large pyramidal cells, for example, lies near the basal part of the cell; in the smaller cells this takes up nearly the entire cell.

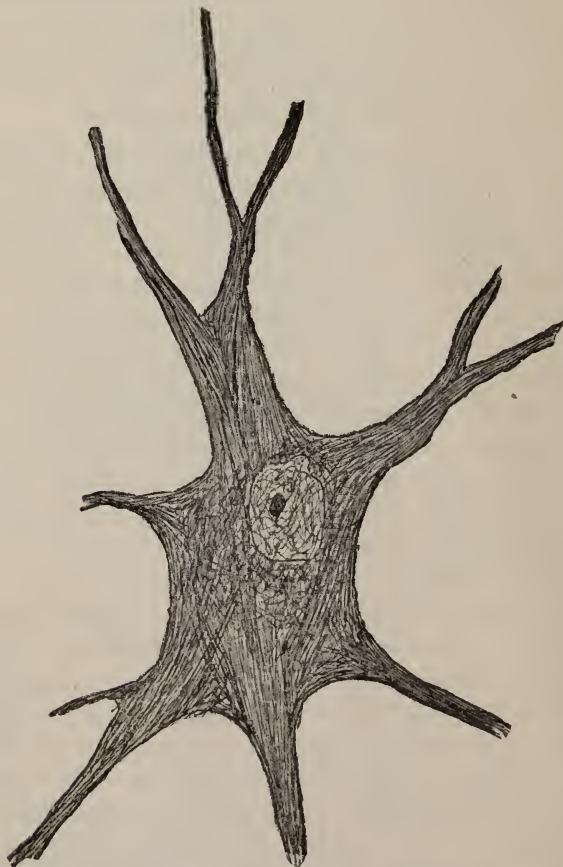


Fig. 3.—Large multipolar cell from the reticular formation of the medulla of a rabbit. (Cajal method.)

In addition, fibrils in variable numbers go from dendrite to dendrite and from axis cylinder to dendrite through the cell without perceptible relation one to another.

Bethe also found by his method that ganglion cells of vertebrates are surrounded by a close-meshed net-form trel-

lis which he calls the Golgi net and which he believes is of nervous nature.

He has framed an hypothesis concerning the transmission of the nervous current from this network to the cell and to the dendrites. The dendrites, *i. e.*, the protoplasmic processes, of the cells end blind. Probably the fibrils pass into Golgi nets and unite with the fibrils which proceed from the splitting up of the centripetal nerve fibrils to form network formations as in invertebrates.

Nissl agrees that the Golgi net is a new important structural element of the nervous system, but he does not believe that the neurofibrils go out from the protoplasmic prolongations unchanged into the terminal endings of the centripetal medullated fibers. This Golgi network Bethe finds at the surface of all the cells of the central nervous system. In the cerebrum, cerebellum, Ammon's horn, and in the gelatinous substance it extends diffusely. In other regions such as the motor nuclei, the dentate nucleus, the olives, etc., it confines itself to the surface of the cell, but where two cells or two dendrites touch the Golgi network reaches from one directly to the other. It is limited to the gray matter. It does not seem to have any relationship to the vessels, the neuroglia, or the pia. But the nervous nature of this Golgi network, unfortunately for Bethe's theory, has not been proven. Cajal, Lugaro, Donnagio, Marinesco, and others maintain that this network represents nothing else than artificial coagulations of certain albuminoid substances in the interior of vessels. Nissl changes Bethe's hypothesis so that the neurofibrils of the cell border and in the terminal ramifications undergo a change which permits their colorability, a condition previously impossible. (See Fig. 2.)

Bethe's conclusion is that the nerve fibril is a multicellular formation in which the ganglion cells and the end organs are united by neurofibrils, the ganglion cells themselves being of slight functional value. The neurofibrils are the essential specific constituent of the nerves and they are the nerve substance in general. Engelmann's opinion that

the axis cylinder section of medullary substance and the nucleus of Schwann, situated between two nodes of Ranvier may be looked upon as a cell, it has been thought, has received corroboration from Bethe, who found, he maintains, that at Ranvier's nodes the fibrils alone pass through a sieve-like membrane. This, he thinks, fortifies the opinion that these constitute the confines of the cell. Retzius insists that at the above-mentioned places not only the neurofibrils but also the perifibrillary substance is seen to pass through, that the number of the neurofibrils and also the perifibrillary substance is decreased, therefore a rarefaction of the entire substance of the axis-cylinder takes place at the nodes of Ranvier.

Nissl maintains that the complex called a neuron is not the sole nerve element. There are cellular elements which do not have their origin from ganglion cells, and there is a specific tissue of as yet unknown texture lying outside the cells, the so-called "nervous gray." (Fig. 2.) This substance is of a fibrillary nature. According to him, dendrites as well as axis-cylinders terminate blind in this gray substance. Therefore, something must exist which is interpolated between the end of the axis-cylinder which is synonymous with the cessation of the medullary sheaths, and the Golgi nets and the nerve cells situated in the vicinity of the axis-cylinder termination. This is the nervous gray. He has never been able to demonstrate it, but he has attempted to show mathematically that this nervous substance must exist. He says that if the demonstrable cortical elements are added together a large portion of space remains unoccupied, but the work of Beilchowsky and Wolff on the cerebellum by the use of the former's silver method which impregnates neurofibrils and plasma with a remarkable clearness and which demonstrates the continuous transition of axis-cylinder fibrils and closely united peri- and intracellular nets, would tend to upset this.

Ansalone has pointed out (*Contributo allo studio delle Neurofibrille nella midolla spinale dei vertebrati superiori, Annali di Neurologia*, Ann. XXII., fasc 3, 1904) that the

neurofibrils of the cells in the spinal cord vary in appearance according to the region of the cell which is under inspection. The prolongations also present very variable pictures. In the peripheral portion of the cell there is no network in the proper sense of the term, the neurofibrils running in the shape of thick cords from one pole to the cell to the other, without dividing or anastomosing. The cellular element is not at all differentiated from the surrounding tissue; and it stands in connection with fine fibrils which reach it in a direction nearly perpendicular to that of the neurofibrils. In the deeper regions of the cell the neurofibrils form a network, the communications of which with the nucleus vary according to the section plane of the cell. The fibrillary network may either cover the nucleus completely, presenting a greater condensation and a finer quality of mesh at this level, or it may pass over it like a bridge in the form of more delicate threads. Again, it may be strictly limited to the nuclear outlines where it terminates.

Schaffer, who has recently published a paper on the subject (*Recherches sur la structure dite fibrillaire de la cellule nerveuse, Revue Neurologique*, No. 21, 1905) comes to somewhat different conclusions. The author investigated the finer fibrillary structure of the nerve cells in the spinal cord, the oblongata, and the pyramidal cells of the cortex and concluded that there are two systems of reticular structures in the nerve cells; first, a pericellular external network with thicker meshes at the periphery of the cell-body and in the protoplasmic processes, which is identical with Golgi's net; the beams of this network which represent a sort of cortical substance of the cell, form the meshwork of the cell process also, which become more plainly outlined in the presence of swelling from the general parallel arrangement of the fibrils. All the fibrils of the cell-body as well as the processes anastomose with each other and the fibrillary cellular structure is therefore really a pseudofibrillary structure of a reticular character, although presenting a parallel striped appearance in certain localities. Another net is formed by fine fibrils, which form a polygonal wide meshwork, by branching off from the cross-

beams of the first net towards the interior. This internal reticular system appears denser around the nucleus; it also sends its prolongations into the protoplasmic processes. The internal and the external intracellular network stand in close connection with each other. The author finally observed extracellular fibrils which approach the cell-body in a Y-shaped oblique direction, or parallel to the pericellular network, blending with the body. The Y-shaped branching of the fibrils he also considers with Bethe as sufficient proof of the existence of an endocellular network.

Donnagio, working with an original method (*Anatomia e fisiologia delle vie di conduzione endocellulari Atti del XII Congresso della Società freniatrica, Ital. in Riv. sperim. di Fren.*, Volume 31, T. 1, 1905), concludes that "the existence of a network of fibrils in the ganglion cell, besides the long fibrils which traverse the cell chiefly at the periphery, must be accepted as conclusively proven. It still remains doubtful whether or not these long fibrils anastomose with each other." According to structure, two types of ganglion cells may be distinguished: Cells containing only a network of fibers, and cells containing long fibrils in addition to a network. The axis-cylinder receives fibrils from the network principally.

That endocellular nets exist has been demonstrated again and again but whether this is always true or that Donaggio's conclusions are certain, is by no means definitely established. Fig. 3 gives a fair representation of one of our own specimens, and as can readily be seen, there is no evidence of an endocellular network. Fig. 4, on the other hand shows one of the horizontal cells from the retina, with an indisputable perinuclear net. We have also seen undoubted net formations in the reticular cells of the tegmentum and corpora quadrigemina. Although the observation of others and that we ourselves have seen would tend to support the view of independence of the axome fibrils from those of the dendrites, still we cannot accept, at least from the evidence offered, the views of Schaffer regarding the fine fibrillary network of the cell body and

dendrites in contra-distinction to the perinuclear and axonal meshes. He practically rests his case on the Y-shaped branching, which, when we stop to consider that we are dealing with almost ultra-microscopic structures, and therefore exposed to many possibilities of error, are altogether too uncertain to be of such fundamental value.

The relationship existing between cell fibrils and axis-cylinder fibrils is still a matter that requires very great

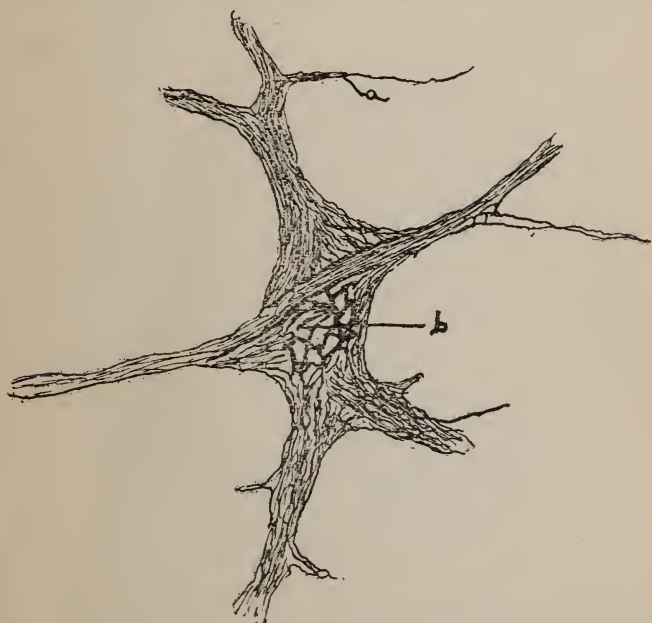


Fig. 4.—Horizontal cell from retina of cat of eight days. A axone; B perinuclear network. (After Cajal.)

elucidation. Held and Wolff maintain that they have seen fibrils leave the terminations of the axis-cylinders and enter the body of ganglion cells, by means of Cajal's method and Bielchowsky's method respectively. Mahaim studied the nervous system of the cat, the crow and the human subject, by the various Cajal methods. He did not in a single instance observe fibrils penetrating into the cell body. He is of the opinion that Wolff's reticulum is the result of faulty technique; this is not, however, true, for the rela-

tively thick fibers which Held saw penetrating the cell. The author believes that this is an anatomical "semblance," for the experimental methods show by chromatolysis the marked difference existing between sections of axis-cylinders arising from a cellular nucleus, and sections of axis-cylinders penetrating into a nucleus. The relation between the pericellular terminations and the body of the cells cannot, therefore, be very intimate; and it may be stated that these terminations "are not a part of the cells." The author hopes that it will prove possible by means of appropriate experimental methods to observe degenerated pericellular masses surrounding an intact cellular body.

Bartels, studying the fibrillary structure of the ganglion cell layer of the retina by means of Bielchowsky's fibril method, maintains that he has succeeded in demonstrating the presence of fibrils which pass from a protoplasmic process through the cell and into the axis-cylinder process. He also observed other fibrils passing from one dendrite into the other, without traversing the cellular body itself. Finally fibrils were noted connecting the processes of different cells. On the other hand, Vermes (*Ueber die Neurofibrillen der Retina*, *Anat. Ang.*, Volume 26, Heft 22-23, 1905), who studied the retina of the horse, dog, rabbit, cat, guinea-pig, and also of the human subject by means of the Cajal and Bielchowsky fibrillary methods, does not consider that the continuity of the neurofibrillary layer has been demonstrated. Ramon y Cajal (*Trabajos del Laborator de investigacion biol. de la Universidad de Madrid*, III., 4, dic. 1904) shows that the differentiation of the fibrils in the cells of the retina begins within the plasma zone from which the dendrites arise, and they begin with the beginning of function; they are begotten by function from the cell protoplasm.

The field in which the question of contact or continuity has been most hotly contested, however, is that of the terminal arborizations of axone at fibrils about the cells.

The recent investigations of Cajal, Bielchowsky, Holmgren, Michotte, and others, show that the neurofibrils ap-

pearing on the surface of the cell come in contact with it by means of bulbous formations known as the terminal buttons. Bielchowsky, Held and Holmgren believe that the terminal buttons are fibril net-like structures and that the fibrils of the buttons pass into the interior of the cells. But the terminal buttons are in intimate relationship on the surface of the cell through anastomosing fibrils which form a close network. Bielchowsky holds that this formation is identical to that which Held calls the pericellular Golgi nets.



Fig. 5. Multipolar cell with terminal buttons (Cajal method.)

Cajal divides the terminal buttons, or terminal masses, as he calls them, which were discovered by means of his method into two forms, the end club and the transition club. The former come from the vicinity of the cell in form of a fine thread which swells up as soon as it reaches the cell body and closely hugs the cell membrane or the dendrite with its basis. The transition form are fusiform thickenings of certain fibrils, which also become applied to the cell membrane. The end-clubs are found in large numbers at the cell body, sometimes giving it a mottled aspect like a tiger skin. They are never absent at the

dendrites. Only isolated end-clubs occur at the root cone of the axis-cylinder. VanGehuchten and Marinesco have corroborated (*Boutons terminaux et reseau pericellulaire, Le Neuraxe*, Volume VI.) these observations of Cajal's.

In specimens prepared according to Cajal's method, these end-clubs were observed to be independent of each other as well as of the cell. Cajal's method being an elective nerve fibril method, the pericellular nets, if they exist at all, can only consist of protoplasmic substance. Fig. 5.

Held (*Zur weiteren Kenntniss der Nerven-endfüsse und zur Structur der Senszellen. Abh. der K. Sächs. Ges. d. Wiss. Mat. Phys. LI. No. 2, Volume 29, 1903-1904*) found nets in the ganglion cells by means of Cajal's method. He disagrees with Cajal concerning the connection of the so-called terminal feet or buttons, and shows by photographs of his preparations that the terminal buttons are in continuity with the protoplasmic substance of the cell body; and that the fibrillary net which exists in the terminal button communicates with that of the cell. Hence the terminal buttons really constitute connecting links between locally remote ganglion cells of the central nervous system, in the longer or shorter path of their axis-cylinder processes. But, as we have said above, Held's views in this matter have not been accepted, neither have they been corroborated by acceptable investigators.

Fig. 5 shows fairly well the formation of these terminal buttons as they appear in Cajal preparations. No single plane, however, such as the drawing must necessarily represent, can give an adequate idea of the enormous number which literally cover the cell and dendrites. This and other preparations which we have carefully studied, seem to bear out Cajal's views very forcibly, in as far as we have been quite unable to demonstrate fibrils passing from the end feet into the interior of the cell. Even successful Bielchowsky preparations, or the illustrations of Wolff, do not establish the continuity question firmly enough in our estimation to make their position sure. One should not forget that we are dealing with very

minute structures only to be seen with very high magnification, and there is such a dense network of similar structures that it becomes quite impossible to determine absolutely their ultimate destruction.

The more important communications that have appeared during the past few years on the subject of the disposition of the neurofibrils of the periphery of the body must now be briefly reviewed.

Ruffini (*Ultraterminal Neurofibrils in Human Motor Endplates. Rivista di Fathologia nervosa e 'mentale*, Firenze, October, 1900. Vol. V. Fac. X) states that he reexamined his old gold-chloride specimens of human motor endplates with the result that certain details were discovered, which lead him to believe that in man as well as in lower animals a closed system of anastomoses may originate from the motor ramifications (as discovered by Apathy in *Hirudinea*.) It is quite possible, he believes, that sensory nerve fibrils enter also in connection with this anastomotic system. Ruffini noticed that extremely fine fibrils, of variable length supplied with small "varicosities" sometimes originate from the endplates. These "ultraterminal fibers" seem to terminate after a longer or shorter course within the same muscle-fiber, or more commonly in an adjacent muscle-fiber, either with a varicosity or without one. Occasionally the fibril terminates in a small secondary endplate, from which another thin fibril may take its origin. This goes to show that in man the so-called "motor endplates" are not the real termination of the motor nerve fibers; since other fine fibrils arise from them, the fate of which cannot be definitely determined.

Apathy, in discussing this communication limits himself to some very general theoretical considerations upon the importance of this fact as an argument against the neuron theory. He says that Ruffini's preparations afford proof that nerves do not terminate (or at least, do not invariably terminate—he, for his part, believing that they *never* do) in the endplates of the muscle; just as in the *Hirudinea* they do not terminate in the "terminal crests" described

by him and which correspond exactly to the motor-plates of vertebrates. In vertebrates also, and in a very superior vertebrate at that—exceedingly fine nerve paths emerge from the terminal plate, passing in various directions through the muscle-fiber, branching and entering into adjacent muscle-fibers, just as they behave in the Hirudinea.

If it is permissible to judge from experiments made upon animals of such "inferiority," Apathy continues, his observations lead him to predicate the probable ulterior fate of the ultraterminal branches in the following fashion: In part they may pass through some neighboring muscle fibers—in their way as yet unseen—and in part they branch immediately in the interstitial substance between the muscle-fibers, becoming isolated elementary fibrils. These elementary fibrils then pass to the elementary peripheral net which spreads its large and uneven meshes in the interstitial substance between the muscle fibers. But the elementary net receives in its turn other elementary fibrils which come both from other motor plates, and from nonmotor nerves, from the nerves of general nonspecialized sensation (here perhaps from the nerves of muscular sense.) It is another question, which nerves, in vertebrates, are those nerves of general sensation. In the Hirudinea, Apathy was recently able to recognize those nerves in a special type of nerves described by him in 1897, and designated as "sensory tubes."

Dogiel (*Der fibrilläre Bau der Nerven End-Apparate in der Haut des Menschen, und der Säugethiere; und die Neuronen-Theorie. Anat. Anz.* Vol. 27, Nos. 4-5, 1905) describes the termination of neurofibrils in tactile disks, the typical and modified Vater-Pacini corpuscles, the typical and modified Meissner corpuscles, and the papillary bundles of Ruffini, with the assistance of specimens obtained by means of Cajal's neurofibril method from the human skin and from the skin and mesentery of the cat. He concludes that all sensory end-ramifications consist of more or less small-meshed and completely closed nets of neurofibrils, which are placed in a larger or smaller mass of perifibrillary substance. The shape alone varies in the individual end-

apparatus; round, sometimes curved, small disks of variable diameter (tactile disks, Grandry's corpuscles, swellings at the axis-cylinder ramifications of the typical and modified Meissner corpuscles,) angular scales (human skin, tree-like terminations of sensory nerves of the cutis, mucous and serous membranes, intermuscular connective tissue, tendon); fusiform, club-shaped, round or oval, sometimes flattened, formations (Herbst corpuscles, typical and modified Vater-Pacini corpuscles.) The neurofibril nets are either in direct contact with their surroundings (connective tissue, fibril bundles,) or with special cells (tactile disks) or they have a special sheath. The most marked difference lies in the number of neurofibrils constituting the aggregate of all nets together, in which terminate the processes of a sensory cell, not in the shape of the terminal apparatus. These either reunite by means of individual neurofibrils, or by means of twigs consisting of several neurofibrils; all, together, or a certain portion, forming other end-nets in such a way that the individual terminal apparatus seems to be connected with its fellow (tactile disks, Grandry's corpuscles, leaf-shaped terminations, tree-like ramifications.) All the neurofibrils of a peripheral process stand in direct communication with the intracellular net; the perifibrillary substance continues to the process, together with all its terminal nets, where it reaches the maximum amount, as that portion of the cell body which is not differentiated into fibrils. The central process differs in no important feature from the behavior of the peripheral process; the small, club-shaped thickenings, with which the terminal ramifications rest upon the motor cells and their dendrites likewise consist of closed nets of this character. The neurofibrils do not, however, enter into organic connection with the intracellular net or the undifferentiated protoplasm; simply resting immediately upon the cell. Each sensory cell represents a neuron, which communicates neither with other cells of the central nervous system, nor with other units. The neurofibrils belonging to a neuron, form at least three, closed and firmly united nets: the intracellular, the peripheral, and the central net. Cell colonies exist beyond a doubt in the central nervous

system, meaning that cells of the same type unite by means of their dendrite ramifications. According to their function the closed terminal nets rest either upon the body, or the dendrites, of another colony, or of an individual neuron, or upon non-nervous elements (muscle cells.)

In contradistinction to the Apathy-Bethe neurofibril theory, the author points out that the neurofibrils are to be interpreted simply as products of the differentiation of the nerve-cell protoplasm, and that they serve to build all the terminal apparatus and ramifications, assisted by a portion of the non-differentiated plasm, the perifibrillary substance. The different psychomotor and psychosensory functions belong not only to the neurofibrils, but also to the nerve cell, and all its parts. It is not at present possible to pronounce upon the function and importance of the neurofibrils.

Klomer, working on the crista of the mouse ("Zur Kenntniss des Verhaltens der Neurofibrillen an der Peripherie," *Anat. Anz.*, Nos. 16-17, Vol. 27, 1905,) says the fibrils are seen to approach the cells, entering to a moderate degree into plexus-like ramifications. They then penetrate into the cell at the lower pole, and diverge in shape of a ball, sometimes dividing into branches. The interior of the cell presents a trellis of narrow meshes, which is especially dense directly toward the base of the nucleus. Imperfect staining with methylene blue and Golgi results in the picture of the so-called terminal calices. The fibrils are seen to traverse the cells of the spinal ganglion with a distinct trellis formation, after which they pass to the habenula perforata. Especially in embryos (rodents and mice,) nuclei may be seen very plainly enclosed by very fine neurofibrils. At their egress from the habenula the fibrils diverge at blunt angles. From this point on, fibrils begin to pass in a spiral, rarely in a radiating direction, to the basis of the innermost cells. The others pass in regular flexions of approximately a right angle toward the three outer spiral fiber columns, in such a manner that the fibrils which pass to the first column present one flexion, those passing to

the second two, and those passing to the third three flexions. From the fibrous strands the fibers run upward in a curve to the bases of the outermost cells, and enter the cell, forming a very fine trelliswork in the basal portion especially. Free nerve terminations could not be made out at all. The author points out that the behavior of the nerves varies surprisingly in the crista and macula of different animals. The neurofibrils in the Pacinian body are rather numerous, the perifibrillary substance staining deeply and forming a distinct plate at the peripheral end, under which lies a small trellis of neurofibrils with distinct meshed formation. Concerning the effector terminations, the author assumes a similar structure, supporting his views by the description and illustration of motor endplates and the intracellular ends of the glandular nerves from the skin of amphibia. The author was unable to discover special terminations in the myocardium, the fibrils invariably returning to form strands of parallel fibers, however fine they may have grown before. Neurofibrils do not occur anywhere without being accompanied by their matrix, the perifibrillary substance, which may be either the protoplasm of a nerve cell, of a receptory or effector cell. Both plasma and fibrils are capable of conducting, perhaps to a different degree, just as special contractile fibrils still occur in contractile protist plasm.

Schiefferdecker (Nerven und Muskelfibrillen, das Neuron, und der Zusammenhang der Neuronen. *Sitzungsbericht der Niederrheinischen Ges. für Natur-Heilkunde*, Bonn, December 12, 1904) observed that not only do the fibrils increase in size during the contraction of a muscle fiber, but also the strips of sarcoplasm between them, the latter contracting more strongly than the former. Accordingly the sarcoplasm can no longer be considered as an indifferent substance in the muscle fiber. The conditions existing in the muscle fiber resemble those of the nerve fiber and nerve cell. Here neither the fibrils nor the plasm serve independently for conduction; but the entire nervous activity is to be interpreted as a chemical or chemicophysical process, resulting from a mutual action of the plasm upon the fibrillary substance. The chemical interaction increases in direct ratio

to the surface of the fibrils. Accordingly, the intensity of the process constantly decreases from the cell-body toward the nerve termination. The author suggests a number of new terms. The indifferent protoplasm becomes "myoplasm" as soon as the cell is plainly recognizable as a muscle cell, and it gradually matures into "sarcooplasm" with the formation of fibrils. In a corresponding fashion it is permissible to speak of successive "protoplasm," "neuroplasm," and "myoplasm," in the evolution of nerve cells. To the axoplasm and the axofibrils of the axis-cylinder correspond the teloplasm, and the telofibrils in the nerve termination.

The alterations caused by experiments and by disease have laterly been carefully studied. These investigations have been directed mostly along two lines, namely: the changes occurring in the neurofibrils within the cells under abnormal conditions and those which take place in the peripheral nerves after resection and during regeneration. Marinesco (*Revue Neurologique*, p. 5, 1905) studied by Cajal's fibril method the cells of the twelfth neuclei after cutting the nerve, and noted during the first stages of reaction and reparation disappearance of the fibril network, the fibrils arranging themselves in bundles or in streaks. Later the net makes its reappearance centrally around the nucleus, with simultaneous thickening of the fibrils (increase of the reduction capacity of the fibrils.) Marinesco saw similar pictures in the spinal ganglion cells after section of the sciatic in rabbits, only in this case the changes occurred earlier and disappeared later.

According to Cajal, in the hungry, resting *hirudo* and in resting animals while digesting, the fibril apparatus is very thick. The fibrils are thin when one warms the animals and immediately after they eat. If the animal starves the fibrils are destroyed and in part reabsorbed.

Tello (*Trabajos del Laborator de investigacion Biol. de la Universidad de Madrid*, III, 2-3, p. 113, 1904) says that in the lizard, during its winter sleep, the disposition and the number of fibrils are very unlike those in the lizard during its activity.

In the hibernating adder and the lizard, the fibrils in the cell are enormously thick. They stretch themselves out in the spring to extraordinary fine threads, and all transitional states may be seen in one cell. One never fails to see in these animals the passage of fibrils out from the cells; they go only in the dendrites and the axis-cylinders.

It would seem that in these lower vertebrates, as in Hirudinea, the perinuclear fibril apparatus is the most mighty. Fig. 6.

Ramon y Cajal ("Variations Morphologiques du Reti-

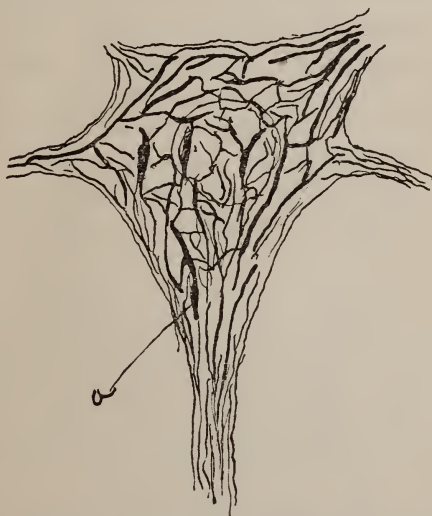


Fig. 6.—Funicular cell from medulla of rabbit; death by rabies. A swollen neurofibril. After Cajal

culum Neurofibrillaire dans certains Etats Normaux et Pathologiques," *Comp. rend. de la Soc. de Biol.*, LVI, 8, p. 372, 1904) shows that the fibrils do not all behave in the same way. The ganglion cells in the cord of the hibernating lizard show definite changes in the neurofibrils when exposed to heat. They become finer, more abundant and lose their bundle formation. The terminal buttons remain unchanged.

The condition of the neurofibrils in the brains of cases

of general paresis have been studied considerably. Jansky ("Neurofibrils Under Normal and Pathological Conditions," *Casopis lék.*, 1905) shows that the structure of the neurofibrils is definitely altered in progressive paralysis. The findings consist in hypertrophy, varicosity, granular transformation, and refraction of the fibrils, more especially in the smaller ganglion cells. Nothing of special interest could be made out in a case of senile dementia; while in another case of catatonic dementia præcox of several years' duration the histological examination yielded the following results only: A distinct, diffuse chromatolysis seen by the Nissl stain, the silver impregnation showing apparently normal conditions. The same striking difference was observed in another case of dementia, in which also a marked chromatolytic change in the cells accompanied an unaltered structure of the fibrils. Advanced alterations with breaking down of the chromatic substance are thus seen to be in no way dependent upon destructive disturbances of the fibrils, nor to determine the latter, since the two histological elements stand in no demonstrable relationship to each other.

Jansky's findings are not in harmony with those of Dagonet (*La persistance des neurofibrilles dans la paralysie générale*, *Comp. rend. de la Soc. de Biol.*, Vol. 57, 1904.) He examined the brains of three patients who had died of general paralysis, using the Ramon y Cajal method. Portions of the cortex taken were from different regions (parietal lobe, central and third frontal convolutions, anterior portion of the third frontal lobe, occipital lobe, cerebellum, vermis, oblongata, and cord.) The extracellular fibrils were found to be universally preserved in all portions, including those in which the brain substance presented marked changes, the fibrils being normal in character. The intracellular or secondary fibrils could also be plainly seen and demonstrated. In the most marked atrophic cells the fibrils formed undulating bundles around granular masses. There was no granulation or pigmentation of the fibrils. The fibrils of the Purkinje cells and cord cells were equally well preserved.

On the other hand, Marchand (*Lésions des Neurofibrilles des cellules pyramidales dans quelques maladies mentales*, *Comp. Rend. de la Soc. de Biol.*, Vol. 57, 1904) has found very distinct alterations. The neurofibrils were examined according to the Ramon y Cajal method, in the pyramidal cells in the left ascending frontal convolution, central portion, and also of the second left frontal convolution, central portion, in the following diseases: Paralytic dementia (two cases,) senile dementia, dementia præcox, idiocy, acute delirium, insanity, and paranoia (one case.)

In the third case of progressive paralysis the lesions of the neurofibrils were most marked in the cells lying close to the meninges. Around the nucleus the neurofibrils were seen to disappear. A rather diffuse but distinct alteration of the fibrils around the perinuclear zone, consisting in atrophy of the protoplasmic processes, with disappearance of the fibrils, was observed in senile dementia. The lesions of dementia præcox were less extensive, presenting numerous pyramidal cells with normal fibrils side by side with cells whose fibrils were partially destroyed. In idiocy and microcephalus the cells were observed to contain many fibrils, but were small and had few protoplasmic processes. The lesions of insanity and acute delirium were rather similar; an irregular atrophy of the primitive fibrils, beginning around the perinuclear zone and spreading irregularly toward the sides. The amount of fibrils was found to be normal in paranoia.

Ballet and Laignel-Lavastine (*Revue Neurologique*, 1904) have likewise observed certain modifications of the neurofibrils in the cortical nerve cells of a patient having general paralysis, which were not found in the cortical cells of three patients who had died of pulmonary tuberculosis. The modifications of neurofibrils which might be expected *a priori* in general paralysis are not visible in all the cells. Like Marinesco, they noted the marked contrast between the fragmentation, granular transformation, and rarefaction of the fibrils of the medium and small pyramidal cells on the one hand, and the integrity of similar fibrils of the large pyramidal cells on the other hand. In most of the

small and medium pyramidal cells the more or less clear perinuclear region is devoid of fibrils. At the base of the prolongations the fibrils are often torn asunder, wavy, or reduced to black points—some of which seem to be rods as the microscope is being adjusted. These configurations are found in a few large pyramidal cells also. Generally, however, only a rarefaction of the fibrils in the vicinity of the nucleus is visible.

Finally, it was demonstrated that in control brains the fibrillary network surrounding each cell is much richer and denser than in the brain of a general paralytic. From this point of view it is necessary to guard against error by comparing sections of exactly the same tint only, since silver impregnation increases in intensity as fields lying closer to the margins are examined.

Marinesco (Lesions of the neurofibrils in certain pathological conditions, *Comp. Rend. de la Soc. de Biol.*, 1905) believes the majority of those pathological conditions in which the chromatophil substance of the ganglion cells is markedly altered, likewise present corresponding lesions of the neurofibrils. The author was able to demonstrate such lesions in acute myelitis, purulent meningitis, foci of softening and atrophic convolutions; the neurofibrils showing variations differing in degree, imperfect staining capacity, diminution in size, complete atrophy, granular degeneration, or thickening and disintegration. In hemiplegia and paraplegia the pyramidal cells present secondary changes analogous to those following division of the axis-cylinder in peripheral nerves. Where the disease runs a rapid course, the neurofibrils likewise undergo rapid alteration. The primary seat of the lesion is also of importance, the neurofibrils rapidly degenerating and entirely disappearing in subcortical lesions and in lesions of the internal capsule. The first neurofibrils to be involved are those in the vicinity of the nucleus; the neurofibrils of the processes following in grave lesions only.

Parhon and Papinian (Note sur l'altération des neurofibrilles, etc., *Comp. Rend. de la Soc. de Biol.*, 1905.) The

neurofibrils of the ganglion cells of the brain were found to be more or less altered in patients having pellagra with marked cerebrospinal symptoms. As a rule the neurofibrils of the small ganglion cells presented slight changes only, while they were almost entirely absent in large cells, such as the pyramidal cells. The nucleus also was markedly altered in the large pyramidal cells. The cervical portion of the cord was more seriously affected than the lower portions, and the root cells worse than the cells of the columns. The anterior horn cells were most deeply involved, presenting alterations resembling those of the pyramidal cells in the zone of Rolando.

Gentes et Bellot (*Altérations des neurofibrilles des cellules pyramidales de l'écorce cérébrale dans l'hémiplégie, Comb. Rend. de la Soc. de Biol.*, 1905) state that in cases of hemiplegia, where the pyramidal tract has been destroyed by the hemorrhage, a number of normal pyramidal cells are found side by side with cells whose fibrils are diminished in number, thickened, fragmented at the periphery, or entirely destroyed, especially in the central portion of the cell. No alteration was observed in a case where there was only a compression of the pyramidal tract.

Wimmer (*Investigations concerning the neurofibrils in the cerebral cortex in pathological conditions, Hospital-stidende*, No. 30, 1905) examined cases of general paralysis, delirium tremens, senile dementia, idiocy, and also one case of chronic trional intoxication by means of the Ramon y Cajal method, with Bokay's modification. In all these cases he observed a more or less marked degeneration of the fibrils in the pyramidal cells, especially in the small and medium-sized cells. A form of degeneration characteristic of each individual disease could not be demonstrated.

Bielchowsky and Brodmann (*Journal of Psychology and Neurology*, V, 1905, p. 173), in discussing the changes in the fibrils in pathological conditions, say that the scanty histopathological examinations chiefly consider the qualitative alterations in individual cells only. These procedures, however, are capable also of furnishing reliable data for the

quantitative defects caused by pathological processes, and moreover they afford a view of the nervous fiber belt situated between the cells. The author's findings were obtained exclusively by means of the Bielchowsky method. For the purpose of obtaining control specimens they began by examining definite areas of three normal brains, followed by the examination of exactly the same convolutions in seven pathological cases of an absolutely typical clinical course (dementia paralytica, dementia senilis, and idiocy). The results of their observations are proof positive of the reliability of the Bielchowsky method, the authors attaching special importance to the following points:

1. With reference to the normal histology of the cerebral cortex, the silver image is capable of completing and improving the customary parenchyma methods in various ways. The entire cortical structure appears much better differentiated in regard to the formation of fibers as well as of cells. (*a*) The nervous fiber-felt is much denser in the outer cortical layers, notably the first, second, and third layers, than in the medullary sheath specimen. Besides the medullated fibers, exceedingly numerous nonmedullated elements, especially in ramifying protoplasmic processes of the ganglion cells, participate in its formation. (*b*) The shape of the cells is very manifold, on account of the large number and great extent of the dendrites which are represented. The Bielchowsky method permits the differentiation of new types of cells, and based upon this, a finer differentiation of the layers in various segments of the convolutions. (*c*) The fibrillary structure of the cells permits the division of cell types hitherto considered as homologous, for instance, various forms of giant pyramidal cells. (*d*) The last-named properties result in greater variability of the cortical arrangement in general within individual layers as well as entire cortical areas.

2. For the pathological histology of organic psychoses, the fibril preparation furnishes results applicable in the uniform valuation of all nervous components. Pathognomonic characteristics of individual elements of the cortical parenchyma cannot be recognized in the fibrillary picture.

(a) As the principal characteristic of progressive paralysis, the parenchyma presents remarkably profound alterations in all the cells even to the disappearance of entire cellular layers with relatively fair preservation of the fibrous constituents. This circumstance is important for the functional valuation of the cell, the significance of which has of late been underrated.

The cell of general paresis is generally characterized by the early and extensive destruction of the processes and by the resolution of the fibrils, with temporary persistence of individual fibers in the body of the cell. The fibrous felt is markedly thinned out, especially in the finest elements.

(b) In senile dementia, in contradistinction to general paralysis, the outer shape of the cell with its dendrites is well preserved, as are likewise the cortical layers. The cellular structure is characterized by enlargement and bunching of the fibrils. The intercellular loss of fibers is less pronounced and affects coarser and finer constituents more uniformly than in general paralysis.

(c) In idiocy the shrunken convolutions presented radically different findings. The arrangement of the layers, the forms of the cells and the fibrillary structure were quite atypical. The number of fibers and cells was notably decreased.

Studies of the fibril changes in peripheral nerves after resection and during regeneration has produced two groups of observers who combat each others' views almost as bitterly as the opponents and defenders of the continuity theory. Waller established his law of regeneration a long time ago. But even in the early eighties Vulpian and Phillippeaux claimed to have seen axis-cylinders developing in the peripheral ends of severed nerves where they considered there was absolutely no chance of communication between the central and peripheral stumps. Since then their observations have been corroborated by Modena, Béthe, Howell-Huber, Marinesco, Van Gehuchten and others. These latter, by means of the various silver methods have found

innumerable fine nerve fibrils in the peripheral stumps where there was no chance of communication with the central portion. These fibrils develop from the protoplasmic bands which arise from the cells of the sheath of Schwann, and can be seen as delicate fibrils lying in these bands. This view has been further supported by the embryological studies of Béthe and Schaffer who claim that the axones of peripheral nerves are not outgrowths of the anterior horn cells but develop independently with the bands of cells from the neural ledge which ultimately forms Schwann's sheath. Unfortunately for this view however their claims have been completely upset by the recent brilliant experiments of Harrison, to which we will refer later on.

This manner of regeneration has been termed auto-genous and has become very popular with the rank and



Fig. 7.—Protoplasmic band containing tons nuclei, and in the interior can be seen fibres crossing or fusing at different points of their course. After Marinesco.

file of neurologists. A certain number of investigators, including Stroebe Vanlair, Lugaro and Cajal vigorously deny this manner of regeneration. Their studies have demonstrated the central outgrowth of the fibres through the intermediary connected tissue into the peripheral stump and then on to their terminals. The fusiform cells and protoplasmic bands in whose vicinity the newly formed fibres are found to perform either nutritive functions or else are endowed with certain phagocytic properties for the absorption of the broken down sheaths and fibres. Cajal has ascribed to them certain properties which he calls chemio-tactic in that they have the power to attract the outgrowing fibrils in their direction.

Marinesco (*Journal f. Psychologie u. Neurologie*, Bd. VIII, Heft 3-4, 1906) after further researches has recently been obliged to completely modify his views on this subject. He finds he can no longer support the claims of Béthe, et al. Use of the Cajal method has convinced him that

while there are many terminal masses and globules in the central stump there is always a large number of fine fibrils, a veritable plexus which pushes swiftly through the intermediary mass of tissue into the peripheral portion of the nerve. He contends that serial sections show diminished activity in the process, the further away we get from the central portion, (a fact also observed by Bethe,) and that there are always fibrils in the intermediary tissue between the two stumps. In concluding, however, he rather spoils his own cause by citing certain cases where after tearing out the central portion, fibrils could be demonstrated in the peripheral stump despite very decided atrophy of the corresponding anterior horn cells.

Our own observations have led us to conclude that one should be very cautious in accepting the various descriptions of alteration in the neurofibrils. That alterations do exist in pathologic states is probable enough to be almost certain, and it is only against the tendency to accept too readily the attempts to classify them that we advise. This seems specially true of the Cajal method, depending as it does upon the well-known, rather uncertain, powers of penetration which silver salts possess. In the most successful preparations by this method there are always two zones, where the staining is absolutely unsuccessful; even in the middle zone, where the stain is most successful, all the cells are not impregnated regularly and evenly, and we have found not infrequently badly stained cells in normal preparations which resemble quite closely some of those described as pathologically altered.

Marinesco has given elaborate descriptions of the changes in the neurofibrils after tearing out the hypoglossus of rabbits. His records show changes from the forty-eighth hour up to thirty days, whereas our own preparations of the hypoglossa nucleus fail to show even at the end of the fifth day the changes he describes as having already taken place at the end of the thirty-sixth hour. We can corroborate his observation that only the anterior external group is affected, but the only alteration in the fibrils themselves seems to lie in

a paler and more delicate stain. They no longer possess the dark, sharply differentiated outlines of the neighboring cells, and the contrast is quite marked. We are unable to see that granulation and loss of structure, he so graphically describes, or a tendency of the fibrils to arrange themselves in bundles.

The Bielchowsky method, on the other hand, is much more logical in that it gives us a more constant stain of all the elements in the section, and the modifications have rendered it simple enough to permit most workers to become conversant with and rely on it. But here also there is need of much corroboration before the evidence can be accepted as final.

The new teachings ask us to imagine a fiber without a cell—a thing which we cannot do unless we give up the cellular theory.

Although there seems to be a necessity to modify the neuron theory, nothing has yet been done to cause it to be abandoned. In fact, some of the later work of Cajal, carried out according to his new method of staining, has strengthened the position of those who adhere to the neuron theory. For instance, Cajal and Retzius have both demonstrated the existence of a neurofibrillary network in the ganglion cells of vertebrates. Cajal maintains that these neurofibrils remain in the ganglion cells and their processes; they do not leave it as claimed by Apathy and Bethe, they do not emerge freely, they do not form connections with each other and accordingly they do not form a true network in the dotted substance, but merely an intimate interlacing. Cajal, Retzius and other investigators maintain that the neurofibrils in invertebrates belong to the cellular structure of the ganglion cells and their processes, being formed within them *in situ* instead of having migrated into them from without as described by Apathy and Bethe. If this is so, and at the present time it must be accepted, it tends materially to strengthen the neuron theory, for no proof has been furnished, apart from their mere existence of their extracellular appearance, and their seeming endlessness.

That the neurofibrils are the actual and only conducting element of the nervous system has been assumed, but the assumption is based upon the correctness of the evidence furnished by Apathy, Bethe, *et al.*, and has been contradicted from most reliable sources.

Even though it is granted for the sake of argument that there is an intercommunication of the neurofibrils belonging to the motor and sensory system by means of networks in the cell-body, this is not adequate ground for asking us to abandon the neuron theory. There is no proof whatsoever that the fibrils have the function of conducting. That is an assumption just as the existence of a fibrillary acid by Bethe as the condition of nervous conduction is an assumption.

On the other hand, the neuron theory does not get all its support from histological study of vertebrates or invertebrates, by any means. As we shall point out later, it receives some of its strongest corroboration from embryology. But even though it were so dependent there would still be much histological evidence in support of it. For instance, the relation of the collaterals in the spinal cord, the free terminations of which can readily be demonstrated, the relation of the end-baskets around the Purkinje cells, and the granular cells of the cerebellum which Michotte (*Le Névaxe*, Vol. VI., No. 3) has particularly studied, many of which we have previously mentioned, and the results of study of the retina. Cajal has been able to demonstrate in the retina fibrillary network within the cell-body, also the anastomosis formation of the fibrils within the dendrites, but he was not able to see the anastomosis between two ganglion cells which Dogiel and Graef described.

One of the strongest supports of the neuron theory has been the teachings of embryology as set forth by His and his school. Those who oppose this theory look upon peripheral nerve fibers as the product of innumerable cells arranged one after another in chains which remain in fully developed nerves in the shape of Schwann's cells (Dorn, Apathy, Bethe, Schultze.) But a recent work of R. G.

Harrison of Baltimore (*Sitzungsber. der Niederrhein. Ges. f. Natur. Heilk. zu Bonn*, 1904,) which has been received most favorably by embryologists and anatomists, gives the most unequivocal support to His' teachings that every nerve fiber is the outgrowth of an individual ganglion cell. Harrison shows, from many observations on the larvæ of amphibia, that Schwann's cells, like the spinal ganglion cells, are of ectodermal origin and come from the so-called ganglion ledge of the neural canal. When this ganglion ledge is removed from the body at a certain stage of embryonal development and then the nerves develop in the normal way, it gives incontestable evidence that Schwann's cells as well as their cells of origin have no participation or significance in the formation of axis-cylinders. In other words, the peripheral spinal nerves may develop when the sheath-cells are entirely absent. This idea Harrison believes is substantiated by the fact that after complete extirpation of the ganglion ledge he has observed the development of naked fibers in the periphery.

His conclusions are: The axis-cylinders of motor nerves develop in a normal way in embryo frogs in which the development of Schwann's cells are prevented by cutting out early the ganglion ledge. The nerve consists in these cases of naked fibers which may be followed as such to the ventral portion of the thigh and tail muscles.

The sensory nerves of the tail in Triton larvæ, naked ramifying fibers, which, from their origin in the posterior cells, and the cells of the spinal ganglia to their ending, show no Schwann's cells. The latter are to be seen for the first time only after fibers have formed; they proceed gradually from the center toward the periphery, as is evident from a comparison of different stages, and also from direct observation of the fins of living frog-larvæ.

The Rohon-Beard's posterior cells of the frog embryo consist of early protoplasmic formations, which gradually stretch themselves under the skin to nerve fibers. The termination of nerve fibers so constituted consists of a thickening with fine pseudo podii prolongations. The nerve

fibers are first of all simple, later they intertwine and eventually through interlacing with neighboring cells constitute a plexus. From the beginning to the end there are no Schwann's cells in these nerves. From which it appears that nerve fibers come exclusively from nerve cells.

Carrying the experiments a step further, Harrison excised in young embryo of *Rana sylvatica* and *Rana palustra* the ventral portion of the neural tubes from the cells of which develop the neuraxons of the spinal motor nerves. He left the neural ledge from which develop the spinal ganglia and sheath-cells intact. The result was that the latter developed normally, but of the former not a trace. Thus he proved incontestably, and in a way reflecting the greatest credit upon his insight and ingenuity, that the motor neuraxons are processes of the anterior horn-cells, and that the sheath-cells cannot by themselves originate these fibers.

The one thing that is needed by the opponents of the neuron theory is to show the transition of a sensory, centripetal impulse, to a motor centrifugal tract without the intermediation of a ganglion cell. If they could do that their claims would be established. Whether they first go in or come out of the cell, whether the elementary trellis formation is originally extracellular or intracellular, whether the fibrils are at all interrupted at Ranvier's nodes, or whether there is a free peripheral termination, are all matters of trivial importance compared with this, for then the neuron theory would lose its applicability and usefulness to the problems of physiology and histology.

37 West 54th St.

ALCOHOL IN THERAPEUTICS.

By C. H. HUGHES, M. D.

ST. LOUIS.

THIS important subject received much and significant attention at the late dinner of the Dominion Alliance against Alcohol of the British Medical Association, Mr. Victor Horsley delivering one of the principal addresses. Our friends, Murdock Cameron, of Glasgow, and Henry O. Marcy, of Boston, also Professor Woodhead of England, being equally forceful in their presentation of the indictment against alcohol as a beverage and too common therapeutic agent.

Sir Victor Horsley took very strong ground in favor of lessening the use of alcohol in connection with surgical operations, and Professor Woodhead, of Cambridge University, was equally pronounced in his opinion that good would result from using less alcohol in the practice of medicine.

They assert that a great change has passed over both branches of the medical profession toward alcohol as a drug. Horsley stated that when he was a student it was the custom to give alcohol freely to each patient before the performance of an operation. Since the discovery by Lord Lister of the principles of antiseptic surgery this custom has largely died out, and a year ago a well-known practitioner said he had not used alcohol in seven years in general practice. It was formerly the custom to give patients alcohol also after operations, but its place has been taken by other drugs better adapted to serve the purpose in view. Professor Woodhead's testimony was equally emphatic and satisfactory as to the progress made in the same direction by British medical practitioners. Men who formerly looked upon alcohol as necessary in the treatment of various diseases

are now satisfied that it produces an injurious effect on the patient's power to resist disease. Men who have made laboratory investigations regarding the actual value of alcohol as a medicine have generally come definitely to the conclusion that its use tends to lessen rather than increase resistance to disease.

Dr. Marcy, of Boston, whose experience dates back to the time when he was an army surgeon during the civil war, and Dr. Murdock Cameron, of Glasgow, added the information that hot water or milk and soda had been used with advantage, instead of the alcohol formerly given so freely to patients about to undergo surgical operations. By hospital statistics Sir Victor Horsley showed that in seven great London hospitals the annual expenditure on alcohol had decreased in forty years from forty thousand to fifteen thousand dollars, while the annual expenditure on milk had in the same interval increased from fifteen thousand to forty thousand. He showed also that during twenty-five years in the Royal Infirmary at Salisbury the annual expenditure on alcohol had fallen off from fifteen hundred dollars to thirty-five dollars.

If alcohol is harmful as a drug in general, it is worthless as a drink. The marked and sometimes fatal affinity that alcohol has for the water of the tissues and cerebrospinal and interventricular fluids and the fluid bathing the nerves and neurones, ought to suggest the danger of its extensive use, even when largely diluted in readily eliminatable form, as in beer and wine and highballs, though when well chaperoned on its way through the system to the excretories with large quantities of water, its harmfulness of course, is thereby diminished.

Yet it is always a menace to organic integrity and vasomotor stability, in therapeutics and should be prescribed sparingly and cautiously with these facts in view; under the wisest of skilled physiological precautions, in hands of utmost therapeutic wisdom, and while alcohol increases thirst and promotes elimination when largely diluted, as in ale and beer, or with plenty of water, it

nevertheless clings tenaciously to the organism and only the largest quantities of water can dislodge it in cases of transient alcoholic toxhemia. This fact should always be considered in administering it therapeutically and especially when contemplating its use as a beverage. This fact generally contraindicates its prescription. It tends to parch the tissues and impair tissue and viscera functions.

Regarding alcohol in any form as an habitual beverage, wisdom dictates abstention from its use as an exhilarant, in the light of the now well-known perverted physiology and pathological anatomy resulting from its use. It is in the main a patho-physiological and anatomical mocker, as it was long ago wisely pronounced before the discovery of its vasomotor paralytic powers, its arteriole, hepatic and other viscera and tissue destructive influence.

The mentally and morally degenerating influence of habitual excessive alcoholic indulgence, though now a matter of common observation, has also long been well known to the medical profession since the researches of Morel called special attention through close observation of alcoholized individuals and their descendants, to the vicious evolution therefrom and therein of the neuropathic diathesis and its destructive train of fatal results to posterity, through which so many of the epilepsias, imbecilities, idiocies, and insanities are engendered.

We now know too sadly and too well through confirmatory observation, of the psychic neurone depressing power of persistent and excessive alcoholism, to look lightly upon the careless use of this potently harmful nerve center poison. The alcoholic multiple neuritides, affecting the peripheral nervous system, through morbid changes, also at their centers, added to our knowledge of the alterations of the psychic and psychic-motor neurones and the changed quality of the ventricular fluids under its prolonged use, admonish us to caution. Its potent influences too in counteracting the poison of the crotulus on the central nervous system is significant of its sometime therapeutic power.*

*The neuritides of alcohol are probably due to its power of abstracting the fluid surrounding the axis cylinder beneath and nourishing the neurilemma.

The insidious hold that alcohol takes of the psychic neurones and all the pathologic changes demonstrated by Bevan Lewis and his co-workers, predecessors and followers, carry an especial caution to scientific observers and thinkers in the domain of practical medicine, causing them to beware how alcohol's fatal potency for harm to the organism may be established through its fatal instrumentality, as that of opium, has been, largely through indiscreet, careless, incautious, indiscriminate prescribing, especially by druggists, and the reckless, thoughtless or venal refilling of prescriptions by crafty pharmacists, etc. The unfortunately and often fatally endowed man and woman with the inborn or morbidly acquired aptitude to fatal alcoholic excess is always with us, and, as it would be harmful to ask such a one to take even a sip of wine, as is often done at social parties and at the family table, it is imperative upon us to be especially cautious in such cases as to the giving of alcoholic medication in our prescriptions.

Several thousands of years have elapsed since it was said by the wise man of holy writ, "Woe unto him that putteth the bottle to his neighbor's lips," yet the treating habit continues, the insidious beer canning, making incipient inebriates, is growing, light wines are considered harmless habitual beverages, to be taken at meals *ad libitum*. We prescribe the alcoholics verbally and undisguised, our banquets are now much more moderate in the serving of alcoholics, yet continue to serve alcoholic drinks first and coffee last; whereas the rational way would be to first offer the exhilaration of coffee and tea and offer, if they offer them at all, the alcoholics last. The better way would be to omit the alcohols altogether or serve them on a side-board or from the bar to those whose already formed habits are such that their psychic neurones can not be brought into convivial action without the coursing of the poison through their circulation to toxically arouse the otherwise dormant brain activity. Set them only for those who, by force of long alcoholic imbibing habit must have the toxic scourge, or think they must, to bring their psychic neurones into vivacious action.

It was not "Luke the good physician" who in the earlier Christian days prescribed "a little wine for the stomach's sake" of *Timothy, but Paul who himself often needed a physician. St. Paul in the cerebrastrhenic periods of his glorious but often over-strenuous life, probably found in the wine of his day, much of it unfermented, a grateful relief to his cerebrally dyspeptic stomach and a restful diversion from his over-anxious thought and duty well-done toward God and man. But, like the cruel crucifiers of his Master, he knew, not what he did to posterity through that brief, uninspired therapeutically wrong admonition to his suffering colleague in Christian work, although the advice sprung from a natural and very common human impulse to help heal an afflicted associate by remedial suggestion. This advice to Timothy, his brother in Christ, has been quoted and acted upon millions of times, both by the saintly and the ungodly, to the harm of mankind, regardless and ignorant of the inherent oinopathic proclivities of many with whom the alcoholic road once taken, even for relief of disease, and sometimes at the communion, is never forsaken. It is not long since a man of New York, clad in the holy vestments of his sacred office, more thoughtless and less pious probably than Paul of Corinth, but a counsellor in the name of the blessed Christ, invoked in His holy name the blessing of God on moderate daily alcoholic beverage drinking, the end whereof is usually moral as well as physical and mental degradation, degeneration and ruin through ultimate demonstrable damage of brain and other organic tissues and viscera.

The medical profession in times past has done its share in this form of unwise counsel along with the clergy and the rest of mankind. Let it do no more of it, but admonish

*It does not appear in biblical record that Timothy was an oinopath or that he ever became a dipsomaniac in consequence of St. Paul's advice. He was not so fatefully endowed in his cerebro-psychic centers, nor was Paul. But what if either had been. Many a gifted Divine has gone the road to ruin from following Paul's advice to Timothy and that other biblical encomium on wine that "it maketh the heart glad." Wine indulged in as a daily beverage has saddened the hearts of millions and maddened the minds of men since this fatal encomium was uttered. Paul's consent to the stoning of the protomartyr Stephen, which through remorse contributed to bring about his own atoning conversion, could have worked no greater harm to mankind than that consented to but repented act of the good apostle.

and practice in the light of later observation and scientific teaching concerning alcohol used as a beverage. The oinopathic diathesis confronts us as never before and the latent drink-crave stricken, needs from us as much consideration as we would give the "pestilence that walketh in darkness" to destroy.

Bacchus will reign the supreme monarch over the lives of many men long after we shall have gone from earth, but let us not promote the perpetuation of his power over the human brain and mind by friendly aid and counsel against our knowledge and conviction, revealed to us by experience and the unerring teachings of science, as to alcohol's morbid destroying marks made on the human anatomy.

We are bound to consider the unfortunate psychopath, to whom alcohol in quantities which would not markedly impress another, acts as an immediate poison to the brain, developing the instability of delirium and even of marked insanity. He astonishes his friends who are imbibing with him by becoming crazy drunk within a few minutes after taking a few social glasses. This is the man from whom his companions wish then to get away, but often cannot, until some untoward denouement happens to require his restraint. This is the sort of oinapath in whom a little liquor is a dangerous thing and is diagnostic of the psychopathic diathesis, causing abnormal conduct, unnatural to the same individual in a non-alcoholized state.

This property of alcohol, so harmful if this vaso-motor impression and sequent arteriole dilation be excessive and too long continued, as in cases of habitual inebriety, making the once well man diseased, may come often to our aid if we use it aright, by compensating for the vaso-motor depression by substantial chemico-nurrient support, and by chaperoning it well on its way through the circulation by an ample supply of water for the protection of the tissues, without the patients having knowledge of or discretion in, the dosage or repetition of the prescription.

Conditions of blood stasis, atheromatous vascular contractures and many other states of vessel and blood demand its therapeutic employment, because of its undoubted

physiopathological vaso-dilation at times, its power of arteriole relaxation, as well as in certain states of toxhaemia (often autotoxic) heart depression, that suggest its opportune and helpful use to the physician. We should so employ it always, however, in such manner as will prevent secondary alcoholic disease developing, as we employ other toxic agents, the cautious employment of opium or its salts, for example.

Rightly given it may do good then as a medicine, but it is always bad as a beverage. Bad if used by the patient at his discretion and taken *ad libitum*. Only a judicious physician, conscientiously and with right information, alert and alive regarding its ultimate dangers, as a possibly pathic and fatal habit developer, should prescribe and regulate its use.

It should have place in the medical mind only as a medicine, toxic to the organism like many other medicines when given in quantities and at intervals beyond legitimate therapeutic indications.

The fear of alcohol as a beverage is the beginning, and the abstention therefrom by the oinopath, the psychopath and the doctor who prescribes for them, the conclusion of wisdom.

The vasodilator value of the alcoholics must be considered just as carefully as we regard the vasoconstrictor influence of the bromide salts over the arterioles in therapeutic problems. These properties make both exceedingly valuable in certain features of medical practice not enough considered, as we may glean from therapeutic recommendations of treatment from the present-day literature, though we must regard the danger of the drink habit in giving alcohol and the inherent neuropathic aptitude, while the drug habit of bromide prescriptions is nil, or at most, insignificant. Bromides may be cut off at any time without inconvenience to the user, while alcoholics usually can not, if the patient be well of his malady and it has been long employed.

One exceedingly valuable as well as harmful transient use of alcohol, is in its employment for overcoming sudden

heart failure, syncope and impaired or lost consciousness. If the pulse is perceptible it is better to let the prone position restore to consciousness, with but little alcoholic stimulation nicely adjusted in dosage to the accomplishment of gradual restoration without undue vasomotor dilation, giving the shocked and damaged cerebral neurones and vasomotor centers a chance at physiological recuperation without undue cerebral congestion, especially if the cause be a blow upon the head, which may have caused an organic cerebral traumatism. But the frequent practice of young, inexperienced physicians not specially skilled in traumatic brain diseases or rightly regardful of the vasomotor paralyzing and brain-flushing power of alcoholic liquors, is to give those stimulants while the man is down, too liberally in quantity and repetition for the after good of the brain. And the first thing that suggests itself to the knowing bystander, who may have a bottle or be accustomed to daily alcoholic drinking, is to too liberally give the prostrate victim of head violence too much whiskey or other alcoholics, to the imperilment or aggravation of brain congestion or inflammation after the reaction sets in.

We may put many bad agencies and things to good use, and so may we do in prescribing the alcoholics, but they should be handled, as we may discover from even this incomplete survey of its powers, with a clear insight as to their therapeutic, toxic and ultimate brain-enthraling and disease-engendering potentialities and possibilities, even in prescription form or form of patent medicine.

Indeed, the insidious peril of the alcoholized patent or popularly used proprietary medicine is among the greatest of alcohol's dangers. They clandestinely destroy the victim before he is aware of his thralldom, if he pitifully be among that unfortunate class who, by reason of inherent neuro-pathic infirmity, which too often blindly seeks surcease of neurotic irritability and neurasthenia in these disguised alcoholics. Unlike one of the most venomous of serpents, to which a great man has compared the worm of the still and its product, they give no warning of their concealed, en-

thralling, fatal poison to the neurone unstables and non-resisting who, once well started in alcohol-taking, can never turn back. I mean the dipsopath, the oinopath, the dipso-maniac.

In fact, the aim of all treatment, where narcotics or stimulants of any sort are employed, should be to conserve the integrity of the central neurones, especially the psychic, after the conclusion of the treatment and the recovery of the patient. This is important in the management of chronic alcoholism and acute periodic inebriety, wherein the so-called Keely method, popularized though not originally devised by that surgeon, finally fails, because the neurological knowledge which dismisses a chronic alcoholic after six weeks more or less of brief treatment, is insufficient for the right remedy of the neuropathic antecedents and sequences of chronic alcoholic toxemia, etc.

In conclusion, let me not be understood as discountenancing the prescription of alcoholic preparations or combinations in minimum dose for therapeutic indication in all proper cases, and always well diluted, to minimize incident alcoholic tissue damage, as in diabetes, melancholia and some fevers but in concealed prescription form.

My plea is for physiological and psychological discretion and discrimination in its use, as to dosage, method of prescription and the discountenancing of the erroneous unsanitary beverage idea for the sick, and for the prevention of the alcoholic beverage danger to the well, that may come to certain, and many persons from its needlessly prolonged and voluntary use, especially during and after convalescence.

RECURRENT FUNCTIONAL AS DISTINGUISHED
FROM THE TYPICAL ORGANIC DEMENTIA
SENILIS OF THE LITERATURE.

BY C. H. HUGHES, M. D.

ST. LOUIS.

DEMENTIA of the aged has come down to us from the fathers in psychiatry as generally regarded as an organic, chronic and incurable condition of cerebral and coincident psychic decadence, and described as caused by the invariable arterial, arteriole, or brain cell, atrophic changes of senile decay or as the sequence of other organic brain disease.

Dementia senilis has been mostly described to us as it appears in most chronic forms within hospitals for the insane. The autopsic findings of pure senile dementia as described in the literature have not always been differentiated from terminal dementia in the aged, appearing as the result of previous (and acute) mental disease or a consequence of cerebral sclerosis or of tabes dorsalis or as due to the combined excesses of tobacco, alcohol or other narcostimulants and as age decadence.

But there exists beyond a doubt, for the evidence is convincing if we but closely watch and question our cases, a form of senile dementia which is merely a transient func-

tional cerebrastrheniac dementia, capable of recovery and recurrence, as functional and curable and as liable to recurrence as dementia præcox, a term misleading, inexact and unmeaning, like dementia paralytica, for the paretic is not more demented in the earlier stages of his malady than the paranoiac in the earlier periods of this remarkable cerebro-mental malady, misnamed "dementia paranoides."

Dementia præcox, with some others, might be decently interred, as the *Journal of Mental Science* has recently suggested, in a verbal cemetery. It is an adolescent insanity.*

The term "dementia," in strict psychopathic language should designate the cerebro-mental morbid state its derivation implies—dementia—the deprivation or absence of mind, paralysis of mind, not the simple morbid mental perversion with mental debility or anurgia which some authors term "dementia." But these terms have been scientifically sanctified by long accepted usage of the masters and the savants in our ranks and we shall perhaps long continue to use them.

The recognition of a condition of psychopathic neurasthenia resembling organic dementia senilis is important from therapeutic, prognostic and medico-legal points of view in which the patient and his friends, his heirs and the physicians' standing are alike interested. Because the brain of an aged, debilitated person collapses in involuntarily simulated dementia under mental stress unusual to him, we should not conclude that he is therefore to be permanently demented, even though he may have passed the three score and ten limit, or be yet older and regarded as extremely aged and old enough to die, especially by anxious waiting heirs. Cerebrastrhenia comes to the aged as well as to the young and a transient or permanent impairment of memory and understanding and mental spontaneity of thought and volition may follow therefrom, simulating dementia of the aged and under judicious treatment this form of dementia may be caused to disappear. Shakespeare, in the character

*In this connection the *Journal* notes on this subject in the April, 1905, *Journal of Mental Science* and Dr. McCanahey's paper on Adolescent Insanity in the same number will prove interesting and instructive reading on this subject and incidentally on the subject of my present paper.

of King Lear, has depicted alternating normal and abnormal senility, as he shows in Hamlet both the insanity of neurasthenia and the recuperated capacity for simulation.

In fact neurasthenic aged persons, if they be financially well circumstanced and can be placed congenially from the standpoint of a wise psycho-therapy, conducted by right psycho and neurotherapeutic skill, may recover their mental equilibrium under treatment as readily as the passion or ambition or evil habit deranged young man or woman.

More than three decades of special observation of neurasthenically demented old people, and comparing results with the general run of the organically demented of the asylums for the insane, has led to this conclusion, based on cases both within and without insane hospital practice. I have drawn my conclusions of the curability and differentiation, (from personal clinical observation in certain of my own cases) of functional and curable from organic incurable dementia in the aged, being content on this occasion to cite but one of my own, after noting the remarkable tabulated results given by T. S. Clouston, from the records of the Royal Edinburgh Asylum for the Insane.

Dementia senilis has appeared to me in the trinomial forms—first, the progressive perverted senile neurone involution symptomatically shown in prolonged and progressive psychic departure from normal mental character of the aged person and marked mental enfeeblement of speech, action and conduct of mind. "It is a progressive mental enfeeblement at the period of senile involution," dependent upon organic changes in the brain, therefore a chronic organic psychosis and we might well add that it is in its true typical form a progressive chronic organic psychosis of brain decay and unremittingly exhausted brain function. The true typical organic dement has no marked lucid intervals, so-called, of mental vigor and capacity up to the normal average of the sane old man. Once demented always demented, when the cause of the dementia is solely organic psychic neurone involution. Not so with the functional cerebrasthenic form.

The second form is likewise cerebrally organic to so

with the functional cerebrasthenic form, but secondary and dependent upon precedent organic brain disease, as upon a previously existing mania of brain destroying origin. We then call it secondary or terminal dementia.

The third form is the one we are now discussing. It is a gradually and normally involuted brain plus an unaccustomed brain stress, a transient psychasthenia or neurasthenia involving the brain in weakness, not necessarily permanent, and causing amnesia and other symptoms of dementia not due to organic neurone irrecoverable decadence, but recoverable back to the normal state of the old person under right recuperable influences. With this differentiation between the hopeless and hopeful possibilities in dementia of the aged so long and so erroneously regarded as entirely incurable, let us now examine Clouston's record and results.

Ages.	Total Nos.	Recovered
60 to 65	62	24
65 to 70	63	21
70 to 75	40	15
75 to 80	30	9
80 to 85	3	1
85 to 90	5	2
	<hr/> 203	<hr/> 72

Clouston does not make the differentiation we here offer as an explanation of his recovered cases, but confesses that one of the most interesting and important of the results he obtained from an analysis of those 203 senile cases was a clearer idea than he had before of the course of such cases, their duration, and the results of treatment. The general result was that seventy-two of the cases, that is thirty-five per cent of them, were discharged from the hospital "recovered;" and sixty-nine cases, that is thirty-three per cent, have died; while thirty-three cases were discharged more or less improved, or not at all improved, leaving twenty-nine cases under treatment. The striking fact is the number of recoveries. He explains that the "recovery"

from any form of senile insanity need not necessarily be, and is not as a matter of fact, an absolute restoration to pristine vigor of mind. Some such complete recoveries there were, men who went out and earned their own livelihood, women who went out and governed their households.

Esquirol, after citing Pinel's statement in his *Treatise on Mania*, of spontaneous cure of dementia, says that what nature effected in the case which this celebrated teacher speaks of, art accomplished for a case he records of what would, in our day, be called dementia præcox.* This author of the early nineteenth century, following Calmiel, Baile and Guislain, conceding the curability of acute dementia of adolescence and mental and acute alcoholism, admitted only the retardation of the progress of senile dementia and to some extent its termination, under country air, moderate exercise and tonic regimen, as he saw chronic senile dementia in the halls of the *Maison Royal des Aliens* of Charenton.

But acute dementia, his first variety, as he saw it, "resulting from temporary errors of regimen, from fever, hemorrhage, metastasis, the suppression of habitual evacuation or from the debilitating treatment of mania 'with' sudden invasion exempt from any lesion of motion" is easily cured by the combined agency of regimen and tonic treatment.† And so may the exacerbations of acute and transient seizures of dementia senilis, functional in form, as other varieties of acute dementia are curable, if the transient brain strain is removed and the general organism and the viscera are relieved and rested and restored to normal status of the abnormally oppressed and excessively anurgic burdened old person. Lighten the oppressed brain of the old man or woman of its needless burden of grief or worry, anxiety or care, and it may resume again its accustomed work, feebly as comports with the brain's age, but not abnormally and without dementia.

Andrew Combe who had a clearer conception of the true nature of insanity than any other alienist of his day

**Mental Maladies*, Hunt's translation, 1845.

† *Opus Citat*, p. 473.

said: "Dementia is a form of mental affection, not in itself a distinct disease, but arising from a variety of pathological states each requiring a corresponding treatment. It is characterized by general weakness of mind, involving all the faculties equally."

Dementia is a morbid condition of the brain and mind, a symptomatic expression of disease. It may be symptomatic of epilepsy or a sequel of apoplexy or fever or alcoholism or profound cerebraesthesia, especially in the aged.

"Sometimes it appears from cerebral debility more than from the continuance of actual diseases and then recovery may take place. In the asylum at Milan, cases of dementia from inanition, and which are cured by nourishing food and tonics, are not rare; but, in ordinary circumstances, its appearance indicates incurable disturbance, or actual disorganization of the brain."

Before neurasthenia was named he recognized the senile dementia that results from it, cerebral exhaustion. His dementia of inanition was a neurasthenic recurrable form of dementia caused by psychic stress and exhaustion and curable under rest, etc. This is the form of dementia in the aged of which we are writing.

Dr. Samuel E. Smith, Medical Superintendent of the Eastern Indiana Hospital for the Insane, in his last report, 1905, reflects the experience of other hospital alienists, as well as his and my own, in the following clinical prognostic observation:

"Chronic cases are not entirely without hope and promise something, and they must not be abandoned to the darkness of complete dementia.

"Every alienist knows something of the gratifying results and surprises which occasionally come from the management of so-called incurables, not excepting even the psychoses of degeneration, which are sometimes checked in their downward progress for a period of time, rarely indefinite, and it follows naturally that, as such experiences multiply, the tendency to narrow the incurable class grows."

Hugh H. was a patient admitted to the Fulton, Mis-

souri Asylum for the Insane with a delusional form of acute mania in 1852, resulting from over brain-strain and disappointment in the mining ventures at Galena, Ill. He improved after years of restraint and rest of brain with good sleep and nutrition, as Dr. Smith the Superintendent informed me, during that and succeeding years up to 1861, and passed with age into a state which was called by my predecessors in the management of this institution, Drs. Smith and Abbot, chronic dementia. He was, however, after fourteen years' residence when I first saw him, a quiet, gentlemanly old man, having the freedom of the outside premises and of the neighboring city, going and coming each day and with regularity and punctuality, to meals and to his room and bed at night. He was not "a restless, sleepless dotard without memory, without true affectiveness." He was not slovenly and uncleanly in dress or person and showed no profound persistent general failure of all of his faculties as chronic demented do.

He was neat in dress and cleanly in person and far from that morbid unmanageable second childhood, common to his class, when grave organic degeneracy has made its destructive dementing mark on the aged brain, though he was older and feebler in brain under strained endurance, prolonged physical exercise or the long mental efforts he would sometimes indulge in, when overtaxed by converse with his sane friends. He would then collapse, at times, displaying amnesia and weak delusions and imbecility of mind till recuperated by enforced rest and a period of exclusion from friends and denial of his accustomed visits to town for awhile. When in this state of neurasthenic dementia, his early delusions of running a steamboat under the house at night (owning the premises, etc.) and of his great wealth would appear.

Under the above treatment, however, he would return to his normal state of senile mindedness without amnesia or delusions such as accorded with his age. On one of these occasions, after the asylum had been robbed of its blankets by one of the contending armies in the state, it

was decided to send all the patients, because of lack of maintenance funds, back to their home counties. The country was on fire with excitement but the Major was tranquil and while out again with his friends was asked if the management was going to send him home. To this he responded "yes! The whole country has gone crazy and the managers wisely concluded it was useless to keep us few lunatics confined. We are coming out to join the rest of you."

There was no insanity in this opinion for a wildfire of unreasoning passion was prevailing at that time throughout Missouri and the entire land, brother was arrayed against brother and son against parent or sister, wife and husband were not in harmony, families and neighbors were arrayed in deadly feud against each other and the lately best of friends spoke not or spoke uncivilly as they passed each other by.

Senselessness of speech and conduct of dementia appeared at times during my daily knowledge of him for five years under varying brain tone states. He died of rheumatism and erysipelas in 1880 after I left the institution. His exact age was not known, though he was an old man with very white hair and stooped over when I first saw him in 1867, thirteen years before his demise.

This communication has been lately inspired by hearing the testimony of a number of medical men in an important will case, to the effect that senile dementia was always a continuously and progressively hopeless loss of the faculties of the mind, with but one inevitable ending in mental extinction, and it is to correct this unscientific error for which the literature of insane asylums is largely responsible, that this brief protest and presentation of the functional and curable phase of dementia senilis is presented. There is a true neurasthenic or cerebrasthenic dementia senilis as there is also in the aged a preponderance of organic senile decay, ending in dementia which is hopeless in its outcome. There are transient and curable states of senile dementia, in the treatment of which we should be on our guard, lest we consign the curable to hopelessness, and make no effort for their mental rescue.

To classify all aged neurasthenic functional dements as doomed, would be like signing an unwarranted burial certificate in a case of profound shock from which the patient might rally and live.

Mary C., past the menopause, was a patient from the lower walks of life whom I had classed as an incurable dement, she having come from among the insane pauper class sent by St. Louis County. When the new St. Louis County Insane Asylum was completed and she was taken to Dr. Stevens, the first superintendent of that institution, the transfer involving an overland trip of fifteen miles in a carriage, a ferry ride of several miles, a hundred-mile railway ride and an early autumn moonlight wagon ride, she was put to work in the laundry, beginning with the simplest routine rinsing work. She continued at work in the laundry, rising from grade to grade higher in occupation there, till she graduated through the mangle and drying room as a first class hand ironer and with reason restored and dismissal. She had done laundry work before the access of her insanity, which had apparently passed on to dementia.

In conclusion let me say, this paper is written mainly with a view to correct a common misapprehension among amateur alienists especially, who without adequate clinical experience in the wide domain of psychiatry, conclude that once dementia appears in the aged it must continue to the finale of life. This, like the hopeless view of that psychic misnomer, dementia præcox, a term sanctioned even by Kræpelin, is a prognostic error for adolescent insanity which, with Brower and precedent authorities, I regard as the better and less misleading designation, because it is only a suspension and not a destruction of mental power and manifestation, which may be and is restored under changed environment, altered psychic impression and further cerebro-psychic evolution. Under right circumstances of surroundings, medical management and therapeutics, neither dementia senilis nor dementia præcox are always incurable. They may both be intermittent and recoverable cerebro-psychasthenia senilis of juveniles and should be treated accordingly and not therapeutically neglected as hopeless of recovery.

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CHAS. H. HUGHES, M. D., Editor.
Editorial Rooms, 3872 Washington Boul.

HENRY L. HUGHES, Manager and Publisher.
Business Office, 3872 Washington Boul.

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EDITORIAL.

[All Unsigned Editorials are written by the Editor.]

THE ALIENIST AND NEUROLOGIST, entering the twenty-seventh year of its successful history, gives thanks to its many able contributors, collaborators and subscribers for valuable and cordial support in making it the now acknowledged first exponent of American psychiatry and neuriatry. Its aim has always been to be helpful to the general practitioner, as well as to the Alienist and Neurologist expert, and to the savant in morbid psychology and neurology.

It acknowledges with gratitude many personal letters of cordial appreciation, especially during the past year, and promises to endeavor to continue to merit during the present year the good opinion of the profession interested in its peculiarly useful work.

AN ILLUSTRATION OF PSYCHOKINESIA occurred about the close of the past year in one of our city courts, displayed in the firing of a revolver in the direction of the

judge by one of two sister contestants in a will case, in which they claimed injustice in the judge's ruling apportioning a part of the property to a prenuptial but legitimated heir of the deceased, and the perpetrator and abettor of the uncontrollable, if not premeditated act, was admitted to bail. Our courts ought to learn something of the medico-legal aspect of these psychokinesias and imperative homicidal conceptions, where explosive psychocerebral action dependent upon defective cerebropsychic inhibition are liable to be repeated, like thunderbolts are to come from sometimes fair skies, and rule accordingly. Sequestration for homicidal, suicidal, pyromaniacal and other psychokinesias is the proper treatment, where these impulses are not rational, voluntary and purely criminal. It may be that these girls were overwrought by the strain of the trial, the reflection that an illegitimate was getting a share of their legitimate legacy, and perhaps a non self-restraint training from their childhood, which is now-a-days the cause of much psychokinesia, which should not be extenuated as abnormal and exempting from penal legal consequences. Little-enlightened, self-styled experts in alienism now-a-days often mistake the culmination in crime of lives of unrestraint for the disease form of psychokinesia. The latter being insanity, the former being the wanton wilfulness of pure cussedness, not deserving of the mercy demanded by morbidly engendered psychokinesia. Great criminals, committing the most heinous and revolting crimes, sometimes escape merited legal punishment through pseudo-insanity experts, unable to rightly diagnose insanity from gross criminality, because of ill-acquaintance with the clear data of true psychiatry, being unable to discern or exclude the disease element whose presence or absence alone should convict or set free for a home in an insane asylum.

A pyrophile or a kleptophile, who would attempt to set fire to the court house or steal an attorney's pocket-book, would be charged with incendiarism or petit larceny, and have the question of pyromania or kleptomania or plain incendiarism or theft settled while the perpetrator was kept in custody.

PLACEBO PHILOSOPHERS AND THE BISMARCK ARCH-IPELIGO EXPERIMENT appear to have proven a failure, one of the enthusiasts having died from inadequate raiment and food, exhaustion and exposure, another having been murdered by the savages. This colony was to have been a primitive, simple life paradise, inhabited by a coterie of German authors who were to live "close to nature" like primeval man. They were to be a body of *sol fraters* or sun brothers, who, living and bathing continually in the sunlight, without clothing, on the fruits of the forest and the product of the sweat of their faces, tilled soil and tended herds. It is recorded from Berlin that Herren, Lutzow, Engelhardt and Battman perished of the causes above named, causing the other victims of this delusive Utopian dream to return in despair to civilization, convinced, no doubt, as the deluded enthusiasts of Topolabampo were, that it is "better to endure the ills we have than to fly to others we know not of," probably convinced also that a long life through many generations of routine civilized habit, with its luxuries and *laissez faire*, cannot be exchanged for the food, clothing and indulgence limitation of a non-policed forest life in a non-tropical country. And so the Island of Kabakon must get along yet awhile longer without Utopian philosophers among its population and Deutschland must endure them yet awhile longer at home.

The primitive Arcadians, who apotheosized Pelasgus for having taught them the superior nutrient properties of acorns or herbs, their former diet, were not so cultivated as this coterie of misguided German savants, but they were no bigger fools, though they began their exclusive vegetarian foolishness five or more centuries earlier, even a century or two before Oenotras and several centuries after the singular segregation of Evander.

The breakfast chips and nut foods of the vegetarians of our day originated along way back in gastronomic history. The food cranks are not the sanitary innovators some of them think they are.

They are even antedated by the alchemists and the

fountain of perpetual youth prospectors. The human mind often verges on insanity in its search after Arcadias, Eldorados, Sanitorias and placebos for the mind ill at ease. The discontent of that tired, depressed and dissatisfied feeling of cerebraesthesia prompts and promotes the seeking of many changes of environment. The hope of relief from the monotony and weariness of life probably prompted the bizarre seclusion experiment of these philosophers of Berlin. Before departing they should have consulted an alienist and neurologist like Mendel and his confreres in psychiatry and neuriatry there.

PHYSIOLOGY AND THE PHYSICIAN.—Dr. Wesley Mills, author of *Animal Physiology* and professor of physiology, McGill University, in a recent forceful essay read before the June, 1906, meeting of the A. M. A., on the subject, "a physician's creed, past and present, as to the physiology of the heart," a subject upon which, from study of his work and personal familiarity with his methods, we regard him as expert, expresses the opinion "that physiologists and physicians have stood too much apart. Although the American Physiological Society has held meetings for a great many years in the different great centers of the country, but few physicians ever attend those meetings or even read the reports of the papers presented, probably because they are usually published in periodicals other than medical.

In most instances teachers of physiology today are not men in active medical practice, while many never were doctors, except academically. This has its advantages, but also some disadvantages. Physiology as such, even yet, it is to be feared, is only occasionally brought before the student in the wards of the hospital or elsewhere when once he has passed the examinations on the primary subject; while the medical investigator has been so occupied with morbid anatomy and bacteriology that a physiologic medicine in the sense of one pervaded through and through with the conception that disease is altered function and the whole of medicine a study of this changed function, can not

be said to be the dominant state of mind even yet, though one sees hopeful signs that progress is being made toward it."

Referring to practicing physicians and surgeons, he says further: "For the latter, still more than the former, is apt to indulge in the belief that physiology is somewhat superfluous for his purpose, though I may point out that the surgeon who in our time has contributed most to the advancement of his art, Sir Joseph Lister, was himself a practical investigating physiologist, a fact which has made itself felt throughout his whole career." To all of which, the *Alienist and Neurologist* subscribes its full concurrence.

At an earlier day, when taking official part by invitation in the conduct of the section on physiology of the Philadelphia Centennial Congress, the propriety of our so doing was questioned by some because we were not then an exclusive laboratory worker.

The editor's address in medicine, in its neurophysiological aspects, at the California meeting A. M. A., was unfavorably criticised by some medical friends, of whom the author expected better things. Some of them know better now. They have made some neurophysiological advances since then in the interpretation of the neural relations and therapeutics of disease.

But times have changed and men have changed and are yet changing with them.

The consideration of morbid processes and pathological results and the relation of physiology to them, especially in relation to the neurophysiology is more general in the profession now than then, though Cullen, whose dictum we adopted as our shibboleth at the founding of this journal in 1880, took a markedly neurological view of the processes of disease, a view to which the medical profession must come again with the beaming sun soon to break into a flood of neurological light on the "movements of the organism in disease," as Cullen saw them.

We hope later to find time and space to further dis-

cuss this interesting contribution to current medical literature. In the meantime we commend it to readers of the *Alienist and Neurologist*. We take a personal pleasure in expressing our long indebtedness to our friend for the helping hand we have psychically held so long through his physiological researches.

Dr. R. O. Beard, of Minneapolis, who also considers the subject (including microscopy) in its relation to the practice of medicine (*St. Paul Med. Jour.*, Jan.,) says "that in the service of surgery and internal medicine alike, this branch of physiologic science is destined to fill an important role. It offers to the general practitioner an element of added interest and accuracy in clinical observation. To the expert it offers an opportunity which will become greater, etc."

And Krehl, discussing myocardial and neurogenic cardiac disturbances, urges more thorough study of these cases from a psychological and psychiatric standpoint.—*Muenchen-Medizinische Wochenschrift*.

And so medicine moves forward on neurophysiological, as on other lines of observation, discovery and conclusion, for the betterment of mankind.

A PSYCHIC BLOCK SYSTEM FOR RAILROADS.—The accident bulletin issued from Washington by the Interstate Commerce Commission for the three months ending March 31, 1906, shows the total number of casualties to passengers and employes to be 18,296—1,126 killed and 17,170 injured.

The number of passengers and employes killed in train accidents was 274.

The total number of collisions and derailments was 3,490 (1,921 collisions and 1,569 derailments) of which 289 collisions and 167 derailments affected passenger trains.

The most disastrous accident reported, a collision causing thirty-four deaths and injuring twenty-four, was due to a striking failure of the train dispatching system, according to the commission. A telegraph operator at a small station, who had been on duty all day and more than half the

night, fell asleep, and on awakening, misinformed the train dispatcher as to what had occurred while he slept. The commission concludes after the statement "that the block system repeatedly advocated by the Commission is the true means that ought to be adopted for the prevention of such disasters, especially such as that caused by the over-time-exhausted and sleeping telegraph operator."

There is another and quite as important a block system for the prevention of accidents, and that is a rigidly enforced psychic block system that will block brain-tired and brain-weakened incompetency for all railway positions, when and where inaccuracy of brain work may menace life or mean death.

A block system that blocks overtime work and off duty dissipation or other neglect of rest and sleep, is the need of the hour in railway and other responsible service.

Neurasthenic, sleep-needing brains are out of place where insomnia is a duty and not a disease.

Railway companies that secure adequate sleep to employees will increase net earnings and diminish the injuries they inflict upon people who must travel on their now too heartlessly managed railroads.

LOMBROSO AND THAW.—Caesare Lombroso has made a long range, premature and mistaken diagnosis of the mental state of Harry Kendall Thaw, the murderer of Stanford White, from an anthropological standpoint. Lombroso pronounces Thaw an epileptic moral maniac, a conclusion from the slight symptoms and mostly slight signs detailed by Lombroso, in which the clinically skilled alienist cannot concur on the evidence (?) given by Lombroso. Thaw's sisters, brothers and his mother, now attending the trial, show the facial and aural resemblances in features characterized as evidences of degeneracy and raising the presumption of epilepsy and moral mania by Lombroso, yet they have never displayed the "jealous homicidal obsession" which M. L. says was displayed by Thaw. To become a slave to one's passions may proceed

from persistent indisposition to exercise proper inhibition and not necessarily from overmastering degeneracy. Dalliance with sin by one pecuniarily above the necessity of daily counteracting labor is not *prima facie* degeneracy.

But we shall have to defer criticism of this remarkable *faux pas* of the well-known criminologist for a more extended and critical analysis, to be presented in our next issue.

Thaw's madness can not be traced to an "unconquerable instinct, or epileptiform" state due to the fact that "his father, in a few years, made himself from nothing to a millionaire." Such reasoning is supremely specious and fallacious, and unworthy of the true science of criminology or alienism.

Deviations of form and feature through accidents or defects of evolution and development, and likewise psychic eccentricities are not necessarily evidences of moral degeneracy, and anthropological inference of mental or moral perversion from them, are not always sound psychiatry.

Even as we write, this "homicidally obsessed, degenerate, moral maniac," is aiding his counsel in selecting the witnesses who are to judge him and his fatal act.

Lombroso makes the same mistake here that he has made on another occasion concerning the degeneracy of Columbus.

A RIGHTEOUS JUDGMENT!—A righteous St. Louis City Judge lately decided that hot water in the external ear is a violent external injury. Suits like this reveal the unfeeling resistance to the just demands of those who place their trust and money in insurance companies and the trick juggling with the term "accidental violent external injury." Hot water in the external ear is certainly an external injury, but it is also internal and all external injuries that cause death must also act internally and become internal injuries. It's a wonder the insurance company in its subterfuge resort, did not contest on the ground also that it was not the external injury, but the internal that killed.

But there is a hidden, sinister purpose and rank injustice in this insurance phrase "violent external injury" and that is to bar out the many really violent concussion and cerebro-psyche shocks of accident to the neuraxis that undo one for life or a long period life, changing the mental nature and neurophysical ability for accustomed avocations, resulting from accidents on railway trains, automobiles, explosions, electric shocks and other collisions and other catastrophes that ruin the nervous systems and yet make no sign visible to the mind of the average railway surgeon and insurance medical examiner, or if mentally discernable by such medical men of wide knowledge of the nervous system, they are not expected by their employing directing masters to see it, only through "violent external injury." It is a reproach to railway and insurance medical advisers and an evidence of unscientific knowledge of the susceptibility of the nervous system, that companies employing them have been erroneously advised that grave injury to the brain or spinal cord and peripheral nervous system, including the sympathetic, that injury to these nervous systems so vital to the life, liberty and happiness of individuals, can not occur without "violent external injury."

Mentally lame medical monitors make vicious insurance company rulings. It is fortunate for insured humanity that we yet have courts to rectify such miserable medical mistakes of conclusion.

A better knowledge of the nervous system and the causes of its diseases would save the medical profession humiliation and the insurance companies such just judicial rebuke.

APPEAL BY EDWARD S. MORSE, in *Boston Herald*, to stop steam whistles, and advising us of the painful fact that "within a few years there has come to us on steam railways a series of whistle signals which, in some towns, at least, have rendered life for many unendurable."

In the appeal our attention is called to ordinance of city of Cleveland, Ohio, section 841. "*Engine whistles*. No whistles connected with any railway engine shall be sounded

or used within the limits of the city of Cleveland, except as a signal to apply the brakes in case of immediate or impending danger.

"Section 843. *Stationary engines.* No person shall blow or cause to be blown within the limits of the city of Cleveland the steam whistle of any stationary engine as a signal for commencing or suspending work or for any other purpose except as specified in the next following section.

"Section 844. Nothing in this subdivision contained shall be construed as forbidding the use of steam whistles as alarm signals in case of fire or collision or other imminent danger, nor for the necessary signals by the steam engines of the fire department of the city."

Detroit, Michigan and Newcastle, Penn., have passed similar ordinances, with penalties of fines and imprisonment for infringement.

Mr. Morse would be pleased to know of any other town or city in which similar laws have been enacted. We hope St. Louis will soon be in the list of anti-needless noise cities. Great noises shock the nerves and injure the health of people, and should be abolished whenever practicable.

Dr. C. C. Wiley of Pittsburg, Thaw's family physician, testifying as an expert on insanity, which few family physicians are capable of doing, is reported to have become badly confused under the merciless cross-examination of District Attorney Jerome and admitted that he was not familiar with the Romberg test for insanity, though he apparently, at first made the impression that he knew what it was.

Now the Romberg test or the Brach-Romberg sign, as it is also called, is not a symptom of insanity, but one of locomotor ataxia or spinal sclerosis especially. Only the ataxic insane could have it and they are rare. An alienist might be expert in insanity and not know the significance in spinal sclerosis to which it especially belongs.

He is also reported as "falling down" on the neural

relations of the cardiac nerve, a branch of the pneumogastric, with cervical sympathetic relation.

There are so many hundreds of nerves and more branches that any man might miss in such anatomical memory and yet understand the brain in relation to insanity. Both of these were irrelevant catch neurological and not psychiatrical questions, just as the Argyll-Robertson pupil question was. None of them were germane nor fair and would have been ruled out by the court, if court and attorneys knew how irrelevant they were to any question in psychiatry.

Dr. Wiley certainly made a grave mistake in saying a dilated artery was not diseased. The walls of an artery may dilate through direct disease, as in aneurism or hyperæmia from direct cardiac over-pressure or vasomotor paresis, etc. The district attorney did not however help his cause by confusing this witness. The facts observed will be noted by the jury.

PSYCHIC SANITARY SENSE COMING TO THE SENATE.—Daily Time Limit to Railway Service.—By a vote of 70 to 1, the Senate January 10th passed a bill providing that railway employes engaged in handling trains shall not work more than sixteen consecutive hours, which period is to be followed by ten hours off duty. The one negative vote was cast by Senator Pettus.

The act, unfortunately, only applies to "trains doing an interstate or foreign commerce business." Amendments provide for extraordinary exigencies, as for accidents and delays and obstructions in consequence thereof.

Such a law should be among the statutes of every state, in the interests of health and life of employes and the public. Railway management efforts to annihilate time of brain rest and make the brain a perpetual motion machine should cease. Smart railway management should seek economy and the making of dividends in other ways than by overstraining, unresting, and prematurely wearing out and weakening, for train wreck results, the brains of railway employes.

The people as well as the railway service have rights to healthy, clear acting, vigorous railway service brains, that can always do the right thing, at the right time, for the traveling public's safety. Some American railways' managers appear respecting the demand upon employes as if they were themselves brain-weakened by water on the brain.

THE PROFESSIONAL ENDEAVOR in the direction of abstention from the far too liberal alcohol prescribing of the past, coupled with popular awakening to the brain, body and mind damage of alcoholic daily drink, gives hope of escape from what has been and still is a menace to manhood and national decadence, among the causes that threaten the undermining of civilized mankind.

Wise political communities seeing alcohol's destructive power in the portrayals of pathological science, revealing alcohol's organic ravages of brain, other viscera and the blood vessels and the blood's disordered quality and movements, are taking, or have taken, defensive action. Science only reiterates the teaching that wine, as a health promoter is a mocker, and "whosoever is deceived thereby is not wise." Who hath redness of eyes and blossoming nose and florid face from daily drink hath also redness and more or less congestion of brain and stomach and other organs, because of morbid vasomotor dilation and the "wounds without cause" external, of the inebriate, are wounds from morbid states of brain.

An agency that causes paresis and instability of psychic and psycho-motor neurones and their later more destructive consequences is not an agent for the safe and sane of thought to habitually use, nor is it fit for indiscriminate prescription by physician, priest, trained nurse or patient.

ETIOLOGY OF SPEED MANIA.—*The St. Louis Republic*, noted for its forceful editorial utterances, makes the following comment on a recent communication by Dr. Lee Howard, quoted in the *British Medical Journal*, referring to the motor speed mania:

Doctor Lee Howard, is quoted in the *British Medical Journal* to the effect that the delight in fast automobiling and the craving for strong drink are etiologically the same thing.

A feature of the present age, he believes, is the increasing tendency toward explosions of psychic energy, one objective symptom of which is the mania for high speed, and others the drug mania and the alcohol mania. It is observable that explosions of psychic energy correspond with those of gasoline, which fact suggests the advisability of carrying some sort of a spark-plug in the hat of those dangerous beings whose psychic excess energy predisposes them toward reckless driving.

But, it is doubtful in point of fact—which seems to contradict the eminent physician's theory—whether a crazy chauffeur has an excess of real psychic energy. His cerebral coils probably generate very little. But it is conceivable that buck beer or rye highballs might stimulate his convolutions and excite a craving for speed, while fast driving is known to have a pronounced effect on thirst.

Thus, we suggest for the distinguished doctor's consideration, a vicious circle might be created. Etiologically the relation of booze, benzine and the bughouse is plain enough if we adopt the more practical and less scientific viewpoint.

ADEQUATE TIMELY SLEEP FOR THE NORMAL MIND, as well as the abnormal, is a recognized essential of psychic sanitation in the estimation of alienists, neurologists and physicians in general, though it does not yet appear to have received the consideration it deserves from those who demand and dispose of the mental work of others, especially in the railway service, in witness whereof we cite the following, to be added to many other and more disastrous brain strain requirements of our American railway management, but none more cruel and criminal on the line of unremitting brain work demanded.

Last November, seven men, the crew of a Lehigh & Hudson freight engine, who had been in continuous service three

days and three nights, went to sleep on the locomotive while it was on its way from Franklin Junction to Phillipsburg. All hands were asleep when the engine went through the yard at this place, passing the red light turned against them.

The telegraph operator here wired a message to the operator at Martin's Creek, the next station down the line, to be on the lookout for the engine. Its speed was considerably reduced when it reached that station, and the operator succeeded in boarding it, and preventing a collision by running the locomotive to a siding.

The fire was hastily pulled from under the boiler to prevent an explosion, the water having reached a very low point.

OUR PROPRIETARY PHARMACEUTICAL ALLIES.—It is conceded the world over that the best sort of proprietary therapeutic firms have given to the medical profession many elegant and agreeable formulae of valuable but otherwise unpalatable medicines. Among these can be mentioned pleasant combinations of cod liver oil and the pepsins and the enzyme class. Certain pharmacists have advanced the profession a century in knowledge and use of certain drugs, such as the Parke-Davis specialties.

Others have given us American products where we had before relied on foreign markets, such as the Powers & Weightman quinine, the Fairchild Brothers & Foster's enzymes, Squibb's chemicals, etc.

Combinations of definite and certain strength, like Battle's bromidia and Peacock's bromides, have especially helped the young country doctor not perfected in pharmacy and looking about for plain, palatable, ready prepared formulae of certain ingredients easily dispensable.

The danger in the use of these agencies is not in the drug, but in their unwise prescribing—in ordering them by the bottle, to be taken at the discretion of the patient. But the same danger exists in ordering any drug of the hypnotic class, or in fact of almost any kind, and leaving its renewal and continuance to the dis-

cretion of the patient. Medicine prescribed for repetition at the discretion of patient or druggist almost always proves a source of greater harm than final benefit.

IN LINE WITH THE ADDRESS OF VICTOR HORSELY, before the Canadian meeting of the B. M. A., is the appeal for more milk and less beer for the babes and mothers of England and Wales, in the face of the infant mortality of last year, viz: one hundred and twenty thousand babies dying there last year, making even the fittest unfit to live, as Sir Henry Campbell Bannerman said. Pure milk depots for babies and mothers in lieu of beer are the remedies, and the medical advice for nursing mothers of beer in lieu of better nutrition is an exploded fallacy. The milk depots have already done much good, as Minister John Burns lately attested.

He found that the deaths in the sterilized milk fed area ranged from 50 to 100, while in other areas the death-rate was from 100 to 273. In the face of figures like that it seemed to him that the milk depots experiment, incomplete though it had been, was an experiment that warranted careful development and rapid extension. The bill on the subject is now in draft.

He said that one of the chief contributing factors towards the high mortality was the tendency on the part of people to spend on beer what they should spend on food for their infants, and on leisure and rest for the mother.

It is gratifying to medical science to see more correct common sense and enlightenment taking hold of and swaying the people in regard to the too long entertained delusion that alcohol is a sort of support and food substitute in its many seductive beverage forms, as if any blood and brain cell poison could be good for habitual daily use.

“LEGISLATIVE SCHEMES OF THE AMERICAN MEDICAL ASSOCIATION.”—In nearly if not all the State Legislatures now in session, bills have been introduced which seek to compel manufacturers of proprietary and patent medicines

to make public the formulas and private processes by which their preparations are made. A bill of similar import, dealing with interstate traffic in medicines of this class, has also been proposed in the House of Representatives at Washington.

The large number of these bills, their apparent spontaneity, and the noisy clamor of their advocates, would make it appear that the American people had suddenly awakened to the realization that they have long been victims of some monstrous wrong.—*Abstracted from "Legislative Schemes," sent out by the American Journalist.*

And this is the monstrous truth so far as concerns a certain number of the many new name-blind combinations offered to the medical profession for prescription on faith rather than that definite knowledge of composition necessary for intelligent prescription and the gleaning of accurate therapeutic knowledge.

"SIGHT-UNSEEN" LAWYER AND DOCTOR CHOOSING.—Secretary Shaw tells this story on Congressman Smith, of Iowa, according to the *St. Paul Pioneer Post*. A prisoner arraigned before the criminal court. Present in court room: Lawyers Smith, Brown and Greer.

"Where is your lawyer?" inquired the Judge.

"I have none," responded prisoner. Haven't any money.

"Do you want a lawyer?" asked the Judge.

"Yes, Your Honor."

"There is Mr. Smith, Mr. Brown and Mr. Greer," said the Judge, pointing to the young attorneys awaiting briefless and breathless for something to turn up, "and Mr. Alexander is out in the corridor."

The prisoner eyed the budding attorneys in the courtroom, and after a critical survey stroked his chin and said, "Well, I guess I will take Mr. Alexander."

And this is the way many people also select their physician. They wait until some emergency demands immediate medical aid, and then they have some one suggested on the spot and of whom they know only that he belongs to the profession.

AN ALCOHOLIC DRUNK THEFT OBSESSION.—A young minor, Geoffrey Ryan by name, of St. Louis, without previous criminal record of the kind, after several drinks of whisky unlawfully sold to him, stole a buggy in the West End and proceeded to hold up (with a pistol that would not go off) and rob, under influence of a daring, alcoholically-excited frenzy, one pedestrian after another, till he had robbed on the streets more than half a dozen in the short space of a few hours in the evening, when he was taken into custody by the police.

His predatory performance was not characterized by much more discretion than a procursive epileptic might display, save that being in a buggy and stopping to halt and hold up his victims, served unwillingly to disarm pedestrians of suspicion of the robber.

Excise Commissioner Mulvihill is acting the part of the good psychiatrist and Samaritan by seeking to find and annul the licenses of the saloons who unlawfully furnished the boy drink.

ALL NIGHT AND EIGHT HOUR LABOR SHIFTS FOR THE CANAL ZONE.—We are approaching the time when there will be, as there should be now, with the aid capital and invention have given to labor, three daily shifts for the world's work. It should be inaugurated for humanity's sake and the best of sanitary reasons at the Panama Canal. The work there for all is arduous, the atmosphere is not salubrious, to say nothing of the anophile mosquito that breeds the deadly Chagres haematuric malarial fever and the stegomia faciaata that causes yellow fever, now happily nearing extinction there through the sanitary work of the U. S. government through Colonel Gorgas and his medical co-workers. The facility with which electric light can now be made and placed, would make possible the working of night shifts on the Canal route, and light all night would be salutary to health throughout the entire canal zone.

CONDITION OF CUBAN INSANE ASYLUM.—One thousand and six hundred patients crowded into quarters with capacity for but four hundred. Last October Governor

Magoon visited the National Insane Asylum at Havana and discovered a deplorable state of affairs there.

"One thousand six hundred and sixty persons of both sexes were crowded into filthy and dilapidated buildings, with a capacity for four hundred persons only. They are sleeping on broken cots, relics of the last American occupation.

"Congress made an appropriation to enlarge the asylum, but the money was never expended."

We note with pleasure that Governor Magoon will take steps to erect a decent building and remedy the defects in provision.

HYSTERICAL MONOPALSIES.—It is well to continue the record of these cases as they are sure to keep alive the fact of mind cure, possibilities and the explanation of the marvellous (!) results of mind and faith cure christopathic, osteopathic, and other methods of psychic impression. Three cases of this kind were reported by Dr. C. C. Hersman in *Jour. A. M. A.* last year, one resulting from fright and the other two from traumatic shock. The arm, leg and diaphragm were the seat of the local manifestations. The spasms would last for several hours. These cases prompted Dr. H. to ask if there is an irritating or paralyzing center within the cortical psychomotor centers. Are these nerve center neurones at this time bathed in irritating cerebro-spinal fluid? In other words does some decrease in metabolic elimination cause transient increase of cytotoxins? This question has been asked before in regard to epilepsy and affirmatively answered in the minds of some neurologists.

THE ACHING TOOTH AND THE MOTORMAN.—An Eastern street car motorman stopped and left his car to get his tooth pulled. On his return, minus the tooth, the patient, sympathetic passengers cheered and the car moved joyously on, the crowded sitters and swaying strap-hangers forgetting their own misery in the happiness of the man whose distraction was relieved by the extraction. And the

company continues to "pull the public's leg," as usual, with the customary, inadequate accommodation.

The pull of a traction company with the "powers" of most American cities is stronger than a dentist's tug at a tooth that won't come out, except when they tackle the dens sapientiæ. Dens sapientiæ is easy in the dentist's hands, like the public in the hands of the traction management.

AN ANDROID WOMAN HOMOSEXUALLY CONJUGALLY MATED to a woman, or a gynesiac man, has been lately puzzling the daily press, especially in Chicago, in the person of Nicolai de Raylan, husband of Mrs. Anna Davison de Raylan. Nicolai de Raylan is described as beardless and otherwise effeminate in appearance, and with the usual reportorial embellishment, he is described as shaving four times a day, ineffectually endeavoring to develop a beard.

He was for thirteen years secretary to Baron Schlippenback, Russian Consul. He is reported to have died at Phoenix, Arizona, where through a coroner's autopsy his true sex was discovered.

THE NAME OF THE JOURNAL OF *The Association of Military Surgeons* of the U. S. has been changed with the issue for January, 1907, to "*The Military Surgeon*," and we take pleasure in noting the fact, as the abbreviated name sounds better and means as much. This good journal has been highly successful in its brief career of six years as the pioneer military medical journal in the English language, under the able and judicious editorial direction of its secretary and editor, Maj. James Evelyn Pilcher, Brigade Surgeon, U. S. V., Captain (Retired) U. S. A. and its distinguished managing corps of military medical men.

LORD ROSEBERY'S BRILLIANT IDEA OF THE CAUSE OF THE INCREASE OF INSANITY.—*The London Spectator* reports the distinguished Englishman as saying at the dedication of a hospital for the insane, he found it extremely difficult to discover any convincing reason for the increase

of insane, and he could only suggest that the asylums became fuller because it was impossible for the people with slow-moving brains to keep pace with the times in which we lived.

BEVERLY FARM SCHOOL, located at Godfrey, Illinois, for the rearing of backward children, sends out an attractive illustrated pamphlet, showing its advantages in location, building and equipment. Dr. W. H. C. Smith, the able superintendent, and his capable and accomplished wife, the matron, have been long and faithfully engaged in this important work. Their former experiences were at Elwyn, Pennsylvania, and at the Illinois State Institution, at Lincoln.

THE STUDY OF MENTAL DISEASES.—We endorse the following from the *Medical World*:

In no other department of medicine is the great majority of general practitioners so deficient and so negligent and so absolutely ignorant, as in the domain of mental affections. The average physician has never been taught *anything* about mental diseases, and consequently he does not *know* anything about them. The recent failure of Dr. Wiley, as an expert in the Thaw trial, is an illustration.

THE LIFE COURTEOUS.—It is the little courtesies that we have learned, as human beings, to extend to one another that, almost more than anything else, make life worth living. Bad manners and bad breeding are among the offenses that make the way we travel the harder to endure. And the worst of it is that men appear to be no better in this respect now than they were before they had books to read, forks to eat with and street cars to ride in.

TO AWAKEN EVERY PSYCHIC NEURONE in collateral chains of thought, the neurologist may read with profit and pleasure "Internal Secretion," by E. C. Hooper, B. A., M. B., Asst. Dem. Anat., University of Toronto, it being the president's address before the Toronto Medical Society.

A PSYCHIC SPASM OF UNWRITTEN LAW HOMICIDE is traversing the country, and in St. Louis it has reached the colored people. A negro proprietor of a city saloon stabbed to death another negro because of the latter's being too attentive to his wife. See our next issue for paper on the subject.

ACKNOWLEDGMENT OF INVITATION to be present at the commencement exercises of the Training School for Attendants in the State Hospital at Danville, Pa., Thursday evening, July 12, 1906, is here recorded with expressions of thanks and gratification that this good work continues in this and other similar American hospitals.

POLICE EUTHANASIA IN SAN FRANCISCO.—In San Francisco, during the great earthquake and fire, a policeman was seen futilely struggling with others to rescue a man pinioned in burning wreckage. The helpless man felt the fire begin burning his feet and begged to be killed. The officer took his name and address and shot him through the head, killing him instantly.

QUININE AS A DEFENSE OF CRIME found recent exemplification in the plea of a mother for her 18-year old son before a St. Louis city criminal court, convicted of stealing a horse and buggy and accomplishing seven "hold-ups" and found "with the goods," in one night.

The prisoner admitted taking whisky after the quinine, and was arrested in a saloon.

DR. JAMES L. GREENE, for five years superintendent of the Nebraska Hospital for the Insane, at Lincoln, has tendered his resignation to Governor Mickey, to take effect July 16.

Dr. Greene has accepted the tender of the superintendency of the Illinois Hospital for the Insane at Kankakee.

TWO INSANE FRATRICIDES IN ONE FAMILY and murderous deeds done near the same time, but in different places in St. Louis, are on record for 1906, as per the following verified news item of January 23rd, 1907:

"John C. Straub, who killed his brother, Charles, in Caesar's Cafe, and Edward Croissant, who killed his brother, Albert, at Fourth and Locust streets last summer, were taken to Farmington yesterday to be confined in the State Asylum for the Insane."

IN MEMORIAM.

DR. A. V. L. Brokaw died at his home of gastric hemorrhage, a sequel of La Grippe, the fatal sequellæ of which have not as yet been named.

The treacherous character of the grip as a toxic neurosis, impairing the arteriole control and damaging the vascular coats, is revealed in the history of our dead friend, for he had arranged for a recuperative trip to New York City day before yesterday, and yesterday January 25th he died. He contracted his malady last spring, but heedless, as too many, even medical men, are of the insidious, continuing toxic hold of this persisting disease of the vital nerve centers, he continued his important onerous work as chief surgeon of the United Railways company and surgical head of St. Johns Hospital staff and "fell in the line of duty." He was stricken, as it were, with the knife of his art in his hand.

For his years (but 43) he was preeminent in his profession, his surgical judgment and skill were excellent and he had made his mark on the profession as a man of large opportunities and extensive work, equal to all of the exacting demands of his arduous positions.

It has never been said of him by those who knew him, as has been and can be said of too many operating surgeons, that he was a better operator than diagnostician, that the skill of his hand exceeded the judgment of his head. He was a cautious but bold and successful operator.

Kindly in his personal and family relations, charitable toward his needy patients, appreciative of his own surgical skill, yet modest in his estimate thereof, and of his personal merit, the profession misses and mourns him. He was an honored member of many medical bodies who will miss him from their councils.

He has fallen from the ladder of surgical fame he seemed

securely climbing, all too soon for the hopes of his friends. For the top was in sight and now he is down and dead.

We tender his aged father, our boyhood's senior colleague as interne in the U. S. Marine hospital and to his wife and all of his bereaved family, the sympathy of an appreciative personal and professional friend.

The death of John F. Magner, editor of the *Star-Chronicle*, January 27th, takes from St. Louis and the world a prominent and forceful figure in the right sort of journalism, a journalism that always considered and plead for the good of the people. He was ever on the alert against the forces of evil and was preeminently mindful of the moral, sanitary and political welfare of St. Louis.

He was well trained by liberal education and a cultivated knowledge of men, for his sphere of action. With his pen he fought for the true, the good and the pure, with the rigorous valor of one "not mailed in scorn, but clothed in the armor of a pure intent," hence the force and pungency of what he wrote. No pandering to evil, "no unjust gain increased his substance." He was the true type of editorial writer for true lovers of the right and good in personal and public life.

The sun of his journalistic usefulness "set while it was yet day," and with the setting sun he dropped from the zenith of highest journalism "like a falling star."

Had he the opportunity and a longer lease of life he would have been another McCullough in American journalism.

Who lives and writes as Magner did, lives not and dies not in vain.

From a long and familiar acquaintance in most intimate relations from the time he first began to break with that hyperemic yielding to brain-strain common, in varying degrees, to great and constant writers, especially editors forced to think much and fast under merciless coercive brain pressure by imperative environing demand, we learned

much of Magner's purity of purpose, his power of brain and mind and his fidelity to the duties of his great profession. From relationship we regarded him as not only great and good in our humble esteem, but he was pronounced great and good by mouths of wisest censure in his profession and even those living under the gilded glamor of evil, who felt the sting and smart of his blows for the right, approved their virtue, while seeking to escape. He was built too strong for the foes of virtue "ever to expugn."

Dr. Alonzo Garcelon, the nonagenarian Nester of general medical practice, is dead and strangest of all dead because of an accidental gas asphyxiation. Born in Lewiston, Maine, in 1813 and a graduate of a famous Maine medical college (Bowdoin) he lived his life mostly and died in his native city. He spent a part of his life as Representative, Senator, Surgeon General and Governor of his native state. He had always been a worthy and prominent figure in the profession and the politics of his state. His friends were many, his enemies few and feeble and those who loved him loved him well for his virtues, his warm-hearted attachments and for the sort of enemies he made. The most prominent surviving member of his family is our friend, the retired Vice-President and Superintendent of the Pullman Palace Car Company, to whom with all who may yet remain of this veteran physician's and noble man's family we tender our sympathy. We feel yet the last impress of his kindly eye and cordial hand as we felt them, not long ago, at a meeting of the A. M. A., which he loved so much.

Dr. William James Herdman, professor of nervous diseases and electrotherapeutics in the University of Michigan, died on December 14th at the age of fifty-eight years in a private sanatorium in Baltimore, where he had gone to have an operation performed.

A good man gone too soon. Herdman was genial in personality, capable as a teacher, competent and enthusi-

astic in practice, broad of culture and true and hearty in his friendship. As we miss him so we tender to those who were nearer to him our condolence.

Alexander E. Macdonald, LL. B., M. D., a member of the New York Psychiatric Society, died December 10th, 1906.

For thirty-five years Dr. Macdonald had been intimately associated with the insane. He commenced the study of medicine at Toronto University and graduated M. D., Medical Department, New York University, 1870, LL. B., Law School, New York University, 1881. Lecturer upon Medical Jurisprudence in 1874; subsequently, Professor of Medical Jurisprudence, Professor of Psychological Medicine and Medical Jurisprudence, and was Emeritus Professor at the time of his death. House Physician Hospital for Epileptics and Paralytics, Blackwell's Island, 1870; chief of staff, Charity and Allied Hospitals, Blackwell's Island, 1871. Resident physician, New York City Asylum for the Insane, Ward's Island, 1874. Medical superintendent of the same from 1874 to 1904, the title of the asylum having been changed in the meantime to Manhattan State Hospital, East, Ward's Island.

In 1901 he established the tent treatment of the tuberculous insane, removing them from all communication with any unaffected patients. The principles underlying this undertaking are now universally accepted by the medical profession here and abroad.

An article on this subject was published by the Charity Organization of New York City and the National Association for the Study and Prevention of Tuberculosis.

Dr. Macdonald was a delegate from the American Medico-Psychological Association to the Fourteenth International Medical Congress at Madrid in 1903; President of the American Medico-Psychological Association in 1904; delegate to the Congress of American Physicians and Surgeons, to be held in Washington in 1907; honorary member of the Medico-Psychological Association of Great Britain

and Ireland, and of other continental medical associations.

His splendid administrative abilities made him familiar with every detail in the care of the insane, seven thousand at one time being under his direction. He possessed the rare gift of attracting to himself experienced, trusty and loyal officers and friends.

Dr. Macdonald was one of the most distinguished alienists of this country, and a man of striking force of character. He had a hatred of cant and pretense. His far-seeing powers, his unswerving integrity and great executive ability qualified him in an extraordinary degree for his responsibilities. At all prominent medical meetings his activities were conspicuous. His commanding presence and lofty sense of duty will always be remembered by those who had the privilege to be acquainted with him, and his pupils in all parts of the country will pay many tributes to his memory.

We join in condolence. The deceased was, as from long acquaintance we can attest, a man of distinguished merit in the ranks of psychiatry and a true physician and friend, adorning his profession and society.

SELECTIONS.

CLINICAL NEUROLOGY.

DOUBLE CONSCIOUSNESS BEFORE THE AMERICAN NEUROLOGICAL ASSOCIATION.—The following cases were recorded and discussed at the June, 1906, meeting at Boston:

A Case of Double Consciousness, Amnesic Type. By Dr. Edward B. Angell. The subject of the sketch, a frank, open-hearted Englishman, was married on Christmas last, and within a few days had disappeared from home. Some ten days later a somewhat incoherent letter from him to his wife located him, and he was brought home in a dazed and somewhat confused state of mind. The mental condition so closely resembled hypnotic state that it suggested a means of treatment. Under hypnosis, easily induced, the suggestion was made that on awakening his mind would be clear. Such was the result, and gradually he became alert, clear-minded and able to discriminate between the unreal, dreamy states of consciousness and the real facts of normal existence. For a dreamer of dreams his altered personality disclosed him to be. The tale he told first differed materially from a later one, while both became radically changed when normal consciousness had become established. He had assumed a name under which he was married, different from his own, insisted upon a genealogy, which was fictitious, claimed a college education and a service in South Africa, which he had not experienced; in fact, much of his memory registration was absolutely wrong. Careful investigation disproved most of his experiences. His tales were but creatures of an unstable imagination. His consciousness, when in the abnormal state so akin to hysteria, registered fact and fiction alike; no discrimination being made between

objective fact and subjective image. Such is the condition of the hypnotic. There is a subjective, unconscious falsification of memory, a species of amnesia, for the real events of an uneventful existence and the gap is filled with visions, with real unrealities, with plausible impossibilities. If the facts of such dual existence could be proven much that has been accepted as actual occurrences during the dispossession of the ego would be found illusions. They are but shadows of reality, misty radiographs which rapidly fade from the mind when Richard is himself again. In the present instance the honesty of purpose and frankness of mind are unquestionable. Whatever be the nature of this disturbance of mind it is real, not fictitious. Memory is unstable, not character.

A Case of Alteration of Personality.—By Dr. Richard Dewey. An alteration of consciousness of sixteen days' duration in a girl of twenty-three, not amounting to double personality, being incomplete and of rudimentary form. The symptom-complex embracing a history of migraine, hysteria and an eroto-mania of homo-sexual character. The altered consciousness being preceded by an evolution of systematized delusions (or pseudo-systematized delusions invented by the patient.) The altered personality consisting in an assumption by the patient of the name and character of a person known to her and in authority over her. There being also a total change of handwriting during the sixteen days, the same being vertically upside down and horizontally reversed; *i. e.* running from right to left.

A Case of Double Consciousness.—By Dr. Edward B. Angell.

Dr. Gordon said in the April number of the *American Journal of the Medical Sciences* will be found an article by him on double ego that deals with a case much like the cases described today. It was the case of a young man above the average intelligence. It happened several times that the manager of the place where he worked would give him an order to do a certain thing and he would not obey, while in other circumstances he would do it at once.

Sometimes he would raise his hand to strike his wife, while at other times he was known as a most loving husband. When reminded of it, he would be surprised. The amnesia was complete. At the present time the patient presents this peculiar condition. By a process of mental analysis he has arrived at the conclusion that probably he is composed of two beings. There is No. 1 and No. 2, and No. 2 is independent of No. 1. He gave a number of instances in which he heard No. 2 ordering him to do a certain act.

Now the question is in all these cases: What is the nature of the disease which is responsible for this peculiar condition? Dr. Gordon believed the case which he reported to be one of epilepsy. Dr. Angell's case he believed to be a case of epilepsy. The attacks of motor aphasia are very suggestive of epilepsy. Dr. Dewey's case, it seemed to Dr. Gordon, is a clear case of hysteria.

Dr. Angell said he appreciated the possibility of masked epilepsy as being the cause of this condition. However, careful investigation failed to reveal any indication of the motor symptoms of epilepsy, or even any symptoms suggestive of *petit mal*.

CHOREA.—Poynton and Holmes come to the conclusion that chorea is a manifestation of acute rheumatism and that the *diplococcus rhematicus* is the infective agent in rheumatism. Duckworth regards chorea as a neurohumeral disorder. He contends that the predisposing factor which determines an attack of chorea in a rheumatic subject is the neurotic element. Chorea is considered to be cerebral rheumatism.

Langevin advocates absolute rest in bed, a strict meat diet, hydrotherapy and gradually increasing doses of antipyrin. The administration of antipyrin must be carefully watched, and its use should be superseded in the event of albuminuria, weakness of the pulse or other toxic manifestations.

Thayer found that of 689 cases of chorea observed during one or more attacks, 25.4 per cent showed evidences of

cardiac involvement. In many cases fever was present. Thayer concludes that there is good reason to believe that the presence of fever in otherwise uncomplicated chorea is, in a large percentage of cases, associated with a complicating endocarditis.—*Courier of Medicine*.

RABIES.—Babes accepts as the actual parasite certain fine granules—round, black or blue (with the Cajal-Geimsen stain), found exclusively in the protoplasm of the degenerated nerve cells in the most severely affected parts of the nervous system. Babes looks upon Negri's bodies as representing encapsulated forms of the parasite, in a phase of involution or transformation. It must be admitted that Negri's bodies are generally conceded by investigators to be the cause of rabies.—*Courier of Medicine*.

REVIEWS, BOOK NOTICES, REPRINTS, ETC.

SAUNDERS' COMPLETE CATALOGUE of medical and surgical books, revised January, 1907; illustrated. W. B. Saunders Company, 925 Walnut street, Philadelphia, Pa. Every illustration shows how to do something and is on this account alone especially valuable. All the books are by the best of authors, and the entire catalogue is worth a worthy place in your library.

WOMAN. A treatise on the Normal and Pathological Emotion of Feminine Love, by Bernard S. Talmey, M. D. Published by Practitioners Publishing Co., 62 West 126th St., New York City. Price: Small octavo, with flexible leather covers, \$3.00.

The pathology of the female sexual life and functions from the psychical point of view are of more importance than has been generally considered both within and without the profession. There is no concise scientific work treating this subject like the present book, exclusively designed for use by the general practitioner. The physician seeking elucidation on any pathological phenomenon of female amatory emotions has to work his way through big volumes on psychiatry, legal medicine, philosophy, etc., before he can find more or less complete information on the subject in question. Many a family tragedy, having had its origin in an anomaly of some female sexual function, might have been averted by judicious advice and treatment from the family physician if he had understood the root of the evil.

The author of *Woman* has endeavored to provide the medical, and to some extent also, the legal profession with a work especially devoted to this one subject, "Feminine Love," facilitating the study of the physiological and pathological phenomena of the feminine sexual functions.

This work is useful to the physiologist, gynecologist, alienist, neurologist, general philosopher and anthropological savant.

The sexual instinct, libidio and its symptoms, orgasm, sexual potency, frigidity, nymphomania, masturbation, homosexuality, bestiality, essentials for a happy union, hygienic duration of intercourse, sexual life in relation to offspring, morality, etc., are among the subjects treated.

The book deals cursorily with conditions of sexual perversion and degeneracy in woman, as Krafft-Ebing, Moll and others have done with both sexes, but in less indelicate detail.

Twashtri? conception of the creation of woman, the psychological and utilitarian reasons for chastity, eros and libido, the prevention of masturbation.

The author justly decrys the excessive lasciviousness and voluptuousness of the day and the causes thereof in the abuse of liquors among women, which has reached alarming proportions among them, the modern dance and stage, nude and vulgar art, impure literature, "the modern novelist, who delights in descending to the gutter for his heroes," but we do not notice that he mentions the bill board and the newspaper.

"All these artificial excitements tend to create voluptuousness and this, says Scott, has as its indispensable consequence, degradation of a large number of women."

STARR ON NERVOUS DISEASES.—Organic and Functional Nervous Diseases. By M. Allen Starr, M. D., Ph. D., LL. D., Professor of Neurology in the College of Physicians and Surgeons, New York; ex-President of the American Neurological Ass'n. Second edition, thoroughly revised. Octavo, 824 pages, with 282 engravings and 26 full-page plates. Cloth, \$6.00, *net*; leather, \$7.00, *net*. Lea Brothers & Co., Philadelphia & New York, 1907.

We welcome with pleasure and anticipation of especial profit to our cerebral cortex areas, the second revised edition of this much esteemed work, the first edition

having proven a profitable contribution to our understanding of the subjects on which this valuable book treats.

This book is prefaced with an interesting color showing of the relation of the neurones.

The book being the output of the well-known medical publishing house of Lea Brothers & Co., of New York and Philadelphia, is always a guarantee of good type, press-work, paper and binding.

The subject matter is arranged, illustrated and discussed by an expert of demonstrated and approved ability in the medical profession.

Besides the present work, Dr. Starr is the author of *Familiar Forms of Nervous Disease*, *Brain Surgery* and an *Atlas of Nerve Cells*; all well received by the profession.

A STUDY OF THE MOTOR PHENOMENA IN CHOREA.

By Dr. G. M. Parker, New York. Reprinted from the *Psychological Review*.

This paper is a study of the movements observed in chorea. This is done with a complete awareness of the narrow field implied, yet with the intention of developing through this limited objective, certain definite, though different views of the pathology or psychopathology of chorea. The study is not one involving the basic pathological causes, but it is rather an analysis of its predominant manifestations, with the aim of more clearly defining the existent physiological conditions through a psychological and biological interpretation of the motor phenomena.

The author concludes the interesting subject thus: "Whatever be the fundamental pathological cause of chorea, it is not simply a cortical irritation. The pathology is one which distinctly concerns the motor neurones as systems. That the results of the pathological process are not displayed as irritative neurone discharge; that rather analysis has shown them to be such as would result from the inhibition of the physiological functioning of higher systems, coincident with a hyperfunctioning of the motor neurone systems subordinate to the higher, from which the higher has been evolved and integrated."

THE CHRISTIAN REGISTER, liberal in religion, strong in its moral and sanitary editorials, enlightening and vigorous in matters of world government, its defense of the right and assaults upon wrong, forceful, witty and pure in every matter it discusses has withal, no patent quack or soul-polluting advertisement in its pages.

It is a periodical fit for any hospital or asylum, where only pure reading matter should go to the halls or bedrooms of patients.

TEXT BOOK OF PSYCHIATRY—A Physiological Study of Insanity for Practitioners and Students by Dr. E. Mendel, A. O. Professor in the University of Berlin. Authorized Translation edited and enlarged by Wm. C. Krauss, M. D., Buffalo, N. Y., President Board of Managers, Buffalo State Hospital for the Insane; Medical Superintendent Providence Retreat for Insane, Neurologist to many hospitals, etc. F. A. Davis Co., Publishers, Philadelphia, 1907.

This is a very complete analysis and unique presentation of the characteristic diagnostic features of insanity from an experienced and authoritative source. Professor Mendel of the University of Boston, being well-known to the medical profession of the world and especially to the profession of the United States since 1876, when he first visited this country and the writer of this review had the pleasure of first making his acquaintance.

This valuable book is an excellent psychological analysis of the salient features of insanity, a psychological study as the author terms it, and psychological analysis as the translation expresses it, done by a master mind in psychiatric observation and practice.

The presentation and discussion of the pathological disturbance in the condition of the body—"the cranium and so-called signs of physical degeneration—the stigmata is interestingly and uniquely done. The organic psychoses, paresis, atrophy, arterio-sclerosis and senile dementia, apoplexy and post apoplectic psychoses, the intoxication psychoses, suicide, anti-toxic, alcohol, morphine, the hys-

teric and epileptic and idiotic psychoses are well discussed and remarkably well presented for the limited space assigned them. These and other features we have not space to present.

These in with the treatment presented and the analysis of the general symptom etiology, the study of consciousness, memory, sensory feelings, associations, delusions, etc., which complete this valuable book, make the whole one which we can cordially commend to practitioners and students for whom the work is expressly designed and to the analytically minded alienist and neurologist as well.

The distinguished author, the translator and the equally well-known publisher have done their work well in the making of this commendable volume.

“RECOLLECTIONS OF A GOLD CURE GRADUATE.”—

A grave subject humorously treated as reviewed by a humorous litterateur. Newton Newkirk, a Boston humorist, is the author of this rollicking little volume, with which the most sober-minded may laugh an hour away. It is all there, from the first round to the headache, and the illustrations by Wallace Goldsmith include everything from purple snakes to the tracks of the man who cannot believe he ever made them. Booze is not a nice subject, perhaps, but in the hands of a clever workman like Mr. Newkirk it can be a very funny one.

The editor of *The Alienist and Neurologist* disclaims any part in the above review but he would here wish to remark, not upon “the purple snakes” etc., but upon “the tracks of the man who cannot believe he ever made them.” Aye, there’s the rub!—the psychic foot prints or rather brain imprints of mental deterioration and well recognized diseases that follow after the drunkard who does not know and can not yet be made to believe he could or ever did make them.

The restored periodic, that is the inebriate recuperated again in his nerve centers and sound, rested and rebuilt in his neurones, that his brain-centers are stable and appetite abeyant to his enlightened will for awhile. The inebriate should graduate through a home and school for the imbeciles

and idiots, and hospitals for the insane, many of whom show the conjugal progeny and congenital handiwork of his vicious degenerating habit. Such a view would not engender facetious facility of description nor fondness for further humorous recollections, but it would certainly unfold a tale of hereditary alcoholic woe that ought to set any married or matrimonially inclined drunkard or habitual alcoholic beverage imbibor to serious thinking on the criminality of inebriety.

THE ST. LOUIS COURIER OF MEDICINE has changed having gone under the control of a company of well-known physicians with Dr. Zahorsky as editor-in-chief. The January number presents all the features of a first-class digest of medicine.

HISTORIC NOTES OF CANADIAN MEDICAL LORE AND LECTURE MEMORANDA prepared for and distributed to the British Medical Association by Burroughs, Welcome & Co., is multum in parvo mine of rare and entertaining information concerning primitive medical methods, early Canadian history, Indian medicine men, medicines, incantations, Indian faith cures, phlebotomy, etc.

THE NATIONAL GEOGRAPHIC MAGAZINE is a periodical of interest and instruction for all Americans and in fact for all the civilized world. It is ably edited, well-illustrated and strongly supported by articles of merit from eminently capable pens. The December number for instance gives the present conditions in China by Hon. John W. Foster, former U. S. Sec't'y of State; Latin America and Columbia by John Barrett, U. S. Minister there and the Greatest Hunt in the world, by Eliza Ruhamah Scidmore, Foreign Sec't'y of the National Geographical Society, author of Life in India, China—the long lived Empire, Janirikisha Days in Japan, etc.

Gilbert H. Grosvenor and fourteen eminent collaborators including WJ. McGee, Director of the Public Museum of St. Louis, constitute the Associate Editorial Staff.

THE HESPERIAN is a Western literary periodical of decided but modest, unostentatious merit, now entering the sixth year of its quiet, meritorious existence. It "lives and loves" for literature alone, its editor and publisher, Alexander N. de Menil, being financially on easy street. He is known in literary circles not only because of his editorship of *The Hesperian*, but by his authorship of "Songs in Minority," the "Literature of Louisiana," etc.

Published at 7th and Pine St., at 15c per copy and 50c per year. For sale also at St. Louis News Co.

"THE SPECTATOR" will interest the many readers of the *Alienist* who sojourn abroad a part of each year, as well as our host of intelligent home readers who interest themselves in all matters anthropological, as well as medical and medico-legal, in the limited sense of these latter terms. Moral training, and the making of patriots, the trust system in England, Adonis, Attis Osinis and Sabine (Sabian?) forms are among the matters of interest in the last October 7th number, besides the discussion of British government affairs, poetry, music, letters to the editor, reviews, notes on current literature, etc.

Later numbers are equally interesting.

CONSERVATIVE GYNECOLOGY AND ELECTRO-THERAPEUTICS.—A Practical Treatise on the Diseases of Women and their Treatment by Electricity. By G. Betton Massey, M. D., Attending Surgeon to the American Oncologic Hospital, Philadelphia; Fellow and ex-President of the American Electro-Therapeutic Association, etc., etc. Fifth, Carefully Revised Edition. Illustrated with Twelve (12) Original Full-page Chromo-lithographic Plates of Drawings and Paintings, Fifteen (15) Full-page Half-tone Plates of Photographs made from Nature, and 157 Half-tone and Photo-engravings in the text. Complete in one Royal Octavo Volume of 467 pages. Extra Cloth and Beveled Edges. Price, \$4.00 *net*. F. A. Davis Company, Publishers, 1914-16 Cherry Street, Philadelphia.

We can not now, as we reach the close of the February number of the *Alienist and Neurologist* go over the entire scope of this valuable volume. The well-known repute of the author in electrotherapy, general and special, his fame in the electro-therapeutics of gynecology, our familiarity with the preceding editions and comparative examination of the present justify commendation of the present book to those seeking a practical treatise of the special diseases of women and their treatment by electricity. The author's notes on neurasthenia, pp. 91, *et seq.*, on portable batteries, pp. 245, *et seq.*, his discussion and illustrations on the Roentgen rays, fluroscopy, the handling of currents, electrodes, dosage, resistance, etc., the neuroses of urethra and vulva, sterility, impotence, carcinoma, ovaritis, congestion, senile uteritis will all, as heretofore, interest and hold the attention of the broadly intelligent class of readers who count the *Alienist and Neurologist* among their regular magazines.

AN ILLUSTRATED ANNOUNCEMENT of "Beverly Farm," Private Home and School for nervous and backward children, conducted by W. H. C. Smith, M. D., Superintendent, at Godfrey, Madison County, Illinois, comes to us, showing continued prosperity and well-merited support.

Dr. Smith was in charge of the Collective Exhibit of the Association of American Institutions for the Feeble Minded, located in Section 5 of the Social Economy Division, in the Education Building at the World's Fair, and was awarded a Grand Prize, Diploma and Medal as a collaborator of this Exhibit by the Grand Jury of the Louisiana Purchase Exposition.

"HUMANITY," which comes irregularly to our sanctum, is a collection of short and interesting stories and dissertations of merit and well illustrated. Its motto, "humanity covers the whole field," is illustrated on the front cover in colors which a bill poster is about to paste on the wall.

An article in the October number, entitled "For Profes-

sional Services, *The fine art of graft among physicians*" may possibly apply to some among a certain society pandering criminal class, but does not describe any set of physicians or surgeons with which the editor of this Journal is familiar. There may be such as these, as sandbaggers, confidence swindlers, thieves and murderers among men in other walks of life, but we have not encountered them among our fellows of the regular medical profession. The writer of the article is Richard Jones. He admits that data for his statements of medical villainy and deceit "is" (are "of course") "almost wholly unprocurable" and his concluding paragraphs, conceding that there exist instances of "isolated God-inspired cases of eminent specialists and respectable family physicians," that "there are in a hundred other instances partners in a scheme for graft"—a sure thing game from start to finish because "it (the profession trades in mystery and threatens death)" suggests the old court reproof "*honi soit qui mal y pense*" and one wonders what sort of crafty quack such a writer might have made, had humanity been cursed with him as a member of the medical profession to dishonor the calling and disgrace the noble name of honest humanity.

The review department, after giving well-merited notes of commendation to the Boer War, General Viljoens' interesting book and "Hawaii and Yesterday" by Henry J. Lyman, who as the son of a missionary among the Hawaiians, speaks thus of "*Enigmas of Psychical Research*," by Prof. James H. Hyslop. "Probably no subject is attracting more attention in the religious and scientific sphere of activity than the truths which are being explained as a result of psychical research.

"The objection that can be put forward regarding nearly all works on the subject, *i. e.*, they are filled with bad reasoning and forced conclusions because of the over-anxiety of the authors in this field, will not apply to Prof. Hyslop's work, as he rarely attempts to draw any conclusions from the facts that he brings out and when he does it is with great caution that his conclusions are thoroughly

founded upon good reasoning. His principal idea in the work is not so much to show what has been done in this line as it is to show the virtue and value of the study of Psychological Phenomena."

Save for the one article unjust to the medical profession, which we have criticized, the magazine will please you. Its price is ten cents per copy.

NERVOUS AND MENTAL DISEASES. By Archibald Church, M. D., Professor of Nervous and Mental Diseases and Medical Jurisprudence in Northwestern University Medical School, Chicago; and Frederick Peterson, M. D., President of the State Commission in Lunacy, New York; Clinical Professor of Neurology and Psychiatry, Columbia University. Fifth edition, revised and enlarged. Octavo volume of 937 pages, with 341 illustrations. Philadelphia and London. W. B. Saunders & Company, 1905. Cloth, \$5.00 net; Half Morocco, \$6.00 net.

We can only reiterate the former favorably expressed opinion of this valuable contribution to the literature which is, in each succeeding edition, revised up-to-date. Its authors men who keep themselves abreast of neurologic, neuriatric, psychologic and psychiatric advance. This book is worthy of a prominent, accessible place in any medical library.

Report of the Department of Health of the Isthmian Canal Commission for the month of October, 1906. W. C. Gorgas, U. S. A. Chief Sanitary Officer.

The Growing Years. By William Seaman Bainbridge, A. M., M. D., New York.

A Brief Résumé of the World's Recent Cancer Research. By William Seaman Bainbridge, M. D., New York.

Mysophobia, with Report of Case. By John Punton, M. D., Kansas City, Mo. Professor of Nervous and Mental Diseases, University Medical College, etc.

Was Percival Pott Really Entitled to the Honor of Having a Certain Spinal Disease Called by His Name? By A. J. Steele, M. D., St. Louis.

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Managing Editor, ST. JOSEPH, MO.

And Dr. Steel, after citing Percival Potts' well-known description and interestingly giving somewhat of Dr. Potts' biography, answers that "he was." This brochure is deserving of a place in every medical man's library. Copies of the discoverer's original illustrations and an engraving of Percival Potts, from a painting by Reynolds, accompany this valuable monograph.

Presidential Address. The Physician as a Character in Fiction. By C. B. Burr, M. D., Medical Director Oak Grove, Flint, Mich.

The Bulletin of the University of Nebraska College of Medicine. Contents: I. The Microscope in its Relation to Medicine. By James Carroll, Washington, D. C. II. A Study of Filtration in the Lung of the Frog. By A. E. Guenther and R. A. Lyman, Lincoln, Neb.

Report of Five More Apparent Cures of Pulmonary Tuberculosis Occurring in Working People, who were Treated at a Dispensary Without Interruption to their Work. By John F. Russell, M. D., New York.

Principles of Spelling Reform. By F. Sturges Allen, New York.

Clinical Psychology. By Frank Parsons Norbury, A. M., M. D. Jacksonville, Ill.

An excellent and timely contribution to the subject, especially appropriate to be imparted to a general medical society. The profession needs, and is sensibly seeking, more light on this important subject, in the general practice of medicine from sources of right clinical experience, a source from which this communication comes.

Second Biennial Report of the Parsons State Hospital for Epileptics, Parsons, Kansas.

A Clinical Lecture on Malignant and Non-Malignant Growths. By Wm. Seaman Bainbridge, A. M., M. D., New York.



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PUBLISHER'S DEPARTMENT.

THE SOUTHWEST MISSOURI IDEA OF MEDICAL PRACTICE STATE REGULATION.—At a special meeting of the Gasconade-Maries-Osage Counties Medical Association at Bland, Mo., December last, the following appended resolutions adopted for the consideration of the Missouri State Legislature, were adopted:

“We favor just and honorable medical legislation, to the end that all citizens be protected against incompetent pretenders, and that our laws be so amended that honest, industrious aspirants, with a fair education and good moral character, though with limited means, be enabled to enter the profession after due preparation.

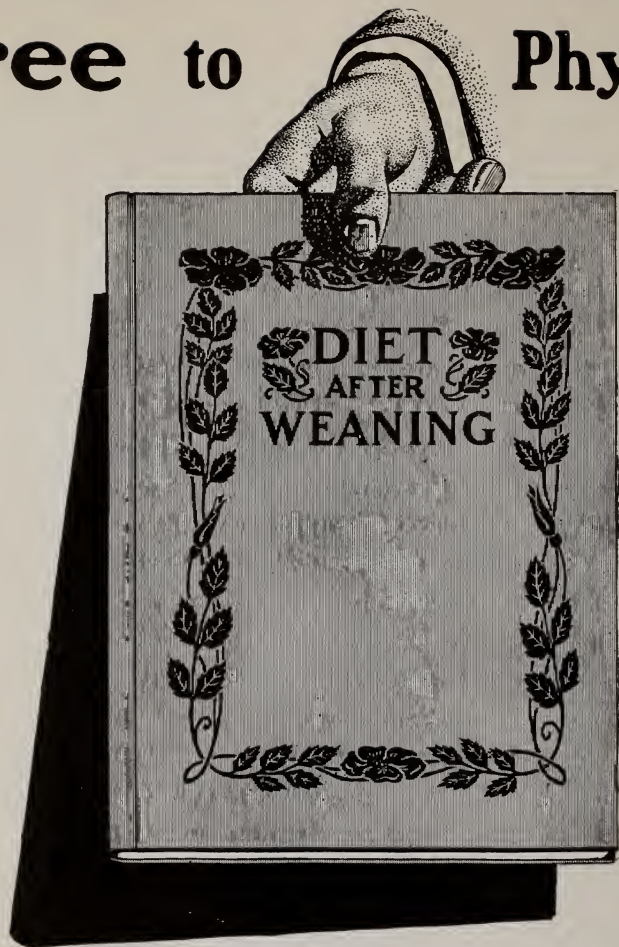
“We believe that in the past medical students have been compelled to carry the financial burden of the Missouri state board of health by being compelled to pay an examination fee of \$15.00 for an examination and license to practice, which we consider unjust, inasmuch as this class is not well prepared to carry this burden.

“We believe that there should be created a state health office, presided over by a state health commissioner, and that in all matters of public health he have jurisdiction; that the law should be so changed that the coroner of each county should be the county health officer; that the state health commissioner and the county coroner have cojurisdiction in all matters of public health and sanitation, and that these officers supplant the present state and county boards of health.

“We believe that the law should be so changed as to provide for a state examining board,* appointed by the governor, who should examine and license applicants to practice medicine, surgery and midwifery in the state.

*Independent of the State Board of Health.

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THE NOBEL PRIZE AWARDS.—The Nobel Prize in Medicine was divided between Prof. Golgi, of the Pavia University, and Prof. Ramon y Cajal, of Madrid. Prof. Moissan, of Paris, received the chemistry prize for his experiments in the isolation of fluorine and his researches into its nature, also for his application of the electric furnace to scientific uses. Prof. Thompson, of Cambridge University, received the physics prize for his researches into the nature of electricity. The King of Sweden formally presented the prizes and medals on December 10th.

MALARIAL CACHEXIA.—The cachexia resulting from malaria is often persistent, even after the active cause has been controlled. In such cases, Gray's Glycerine Tonic Compound proves of great service in stimulating the reconstructive powers of the blood. The toxins resulting from the malarial hemolysis are rapidly eliminated, and increased impetus is given to the restoration of normal red blood cells.

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ness, and that Papine is well appreciated by the medical profession, is shown by the place it has occupied in the medical armamentarium for so many years.—*The International Journal of Surgery*.

THE POETRY OF MEDICAL MEN.—That medical men are not devoid of sentiment and wit, we have from time to time given samples in these pages. The following is our friend of the *Medical Review*, Kenneth W. Millican's Christmas and New Year's greeting to his friends:

A CHRISTMAS SONNET.

Christmas once more! How the swift years glide by!

Bring in the blazing Yule log. Close the door
And draw the curtains on the chill blast's roar

And warring elements. Light up, and vie,
Young folks and old, in Christmas revelry.

Games, stories, dancing when the feasting's o'er,
(But crafty mistletoe thrills young maidens more).

Attune all hearts to mirth and jollity.

Yet not alone at home, but in the soul,

Kindle the glowing fire of kindliness.

Shut out the chilling blasts of self, the stress
Of worldly strife, and then, to crown the whole

A merry Christmas and a glad New Year,
Light up the mind with helpful rays of cheer.

K. W. M.

DYING OF A ROSE IN AROMATIC PAIN came near being the fate, according to the exuberant imagination of a newspaper reporter, of some of the lady customers in a New York drug store December last.

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(3) Coca acts directly on the cardiac muscle.

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THE
ALIENIST AND NEUROLOGIST.

VOL. XXVIII.

ST. LOUIS, MAY, 1907.

No. 2.

IS GENIUS A SPORT, A NEUROSIS, OR A CHILD
POTENTIALITY DEVELOPED?

By JAS. G. KIERNAN, M. D.,

CHICAGO.

Fellow of the Chicago Academy of Medicine; Foreign Associate
Member French Medico-Psychological Association; Hon-
orary President Section of Nervous and Mental Dis-
eases, Pan American Medical Congress, 1893; Pro-
fessor of Medical Jurisprudence, Dearborn
Medical College; Professor of Foren-
sic Psychiatry, Kent-Chicago
College of Law.

THE doctrine that genius* is abnormal, is an old one, probably originating when Shamans preceded their vaticinations by self-induced convulsions and trances. These are much more frequent in primitive man and even in man at the culture level of the Mahommedan countries. They occur wherever emotionalism and religiosity dominate religious gatherings. They were a familiar feature of the Kentucky and Tennessee revivals of the early 19th century. They crop up now in sects where religious emotional intoxication is a part of the cult. This genius folklore influenced the Greek philosophers. Indeed, Plato plainly claims a shamanistic origin. "Delirium," he re-

**Alienist and Neurologist*, 1887-1891.

marks, "is by no means evil, but when it comes by the gift of the gods, a very great benefit. In delirium the sybils of Delphi and Dodona were of great service to Greece, but when in cold blood, were of little or no service. Frequently, when the gods afflicted men with epidemics, a sacred delirium inspired some men with a remedy for these. The Muses excite some souls to delirium to glorify with poetry heroes or to instruct future generations."

"Under the influence of head congestion," remarks Aristotle, "persons sometimes becomes prophets, sybils and poets. Thus, Mark, the Syracusan, was a pretty fair poet during a maniacal attack, but could not compose when sane. Men, illustrious in poetry, arts and statesmanship, are often insane, like Ajax, or misanthropic, like Bellerophon. Even in a recent epoch similar dispositions are evident in Plato, Socrates, Empedocles and many others; above all, the poets."

The shamanistic phenomena so closely resembled epileptic in their frenzies and visions that the two states were long regarded as identical, whence the term "*morbus sacer*." This sacred notion of epilepsy was so dominant in the time of Hippocrates* that he found it necessary to confute it so as to reduce epilepsy to its modern nosologic status. His argument points out that epilepsy is hereditary, and is due also to traumatism and the other causes which are today regarded as producing it. The sacred conception of madness and epilepsy partook of the capricious nature of primitive man and the victims were regarded as malign or benign, as they were offended or placated. They became benign and the insane were under the protection of a deity, as in Mussulman countries. Later still, the demon-possession theory gained dominance, and at length the demon sank into disease. Throughout all this evolution the belief in an inherent affinity between insanity and the genius persisted. During the last seventy years this view has been advanced with a renewed force by many scientists. Most of these practically re-echo the position Moreau de

*Works, Sydenhold Edition.

Tours* took half a century ago. Genius, according to Lombroso†, is a degenerative epileptoid psychosis.

Genius, insanity, idiocy, scrofula, rickets, gout, consumption and the other members of the neuropathic family of disorders are, Nisbet‡ remarks, so many different expressions of common evil—an instability or want of equilibrium of the nervous system.

Another view of genius, assuming it morbid, charges it to a “sport;” an unequal development of some functions at the expense of others.

Genius, according to Huxley, is innate capacity of any kind above the average mental level. From a biological point of view a genius among men stands in the same position as a “sport” among animals and plants and is a product of that variability which is the postulate of selection, both natural and artificial. On the general ground that a strong and therefore markedly abnormal variety is, *ipso facto*, not likely to be so well in harmony with existing conditions as the normal standard (which has been brought to what it is largely by the operation of those conditions), a large proportion of “genius sports” are likely to come to grief physically and socially and the intensity of feeling which is one of the conditions of genius is especially liable to run into insanity.

The same conception is adopted by Havelock Ellis.§ The hypothesis that genius is a product of morbidity has such undoubtedly high authority behind it as to demand an examination of the grounds these authorities give for their opinions. In logic, any hypothesis to be accepted, must not only explain all the facts, but must exclude every other explanation. No alternative hypothesis must be allowed to exist.

It is undoubtedly true, Maudsley|| remarks, that where hereditary taint exists in a family, one member may sometimes exhibit considerable genius while another is insane

*La Psychologie Morbide.

†*Alienist and Neurologist*, 1891.

‡Insanity of Genius.

§*New Spirit: Study of British Genius*.

||*Pathology of the Mind*.

and epileptic, but the fact proves no more than that there has been in both a great natural sensibility of nervous constitution, which under different outward circumstances or internal conditions, has issued differently in the two cases. Such a condition, moreover, is not characteristic of the highest genius, since anyone possessing it lacks by reason of his great sensibility, the power of calm, steady and complete mental assimilation and must fall short of the highest intellectual development of the truly creative imagination of the greatest poet, and the powerful, almost intuitive, ratiocination of the greatest philosopher. His insight may be marvelously subtle in certain cases but he is not sound and comprehensive. Although it may be said then by one not caring to be exact that the genius of an acutely sensitive and subjective poet denoted a morbid condition of nerve element, yet no one after a moment's calm reflection, would venture to speak of the genius of such as Shakespeare and Goethe as arising out of morbid conditions.

That the facts advanced by Moreau de Tours, Lombroso and Nisbet admit of more than one explanation I have elsewhere shown.* Nisbet and Lombroso are peculiarly destitute of judicial spirit and lack ethnologic, sociologic, biologic and pathologic perspective. Nordau is a newspaper scientist, whose statements contradict themselves, as I have elsewhere shown.† Nisbet makes ague a neuropathic disorder. If such tests are to be adopted in defiance of current protozoology every aetiology, except the neuropathic, vanishes from medicine. Nordau, to make out a case against Ibsen, denies facts proven by numerous alienist clinicians.‡ Finding that Americans bought his "Degeneracy" largely, Nordau denied in the teeth of his remarks on Walt Whitman, that "Degeneracy" applied in the slightest degree to America.§ This is amnesia, incomparable with scientific skill or mendacity, which deprives the liar of all right to the title 'scientist.'

**Alienist and Neurologist*, 1891-92.

†*Alienist and Neurologist*, 1895-6. *Medicine*, 1905.

‡*Medicine*, 1905.

§*Are Americans Degenerate?*—*Alienist and Neurologist*, 1896.

To the limitedly educated mind of the average philistine, insane delusions seem akin to poetic fancy because he has never passed from the tyranny of custom and, to his misoneism, novelty is productive only of uncer. Indeed the delusions of the insane are so much akin to his own mental limitations that he is very apt to look upon them as evidences of sanity, while he denounces the fancies of the poet or artist, the opinions of the scientist or the creed of the ethical teacher, which cause him more mental perturbation, as emanations from cranks. In politics this type of philistine has more than once denounced the "golden rule" as the "iridescent dream" of a lunatic. Such philistinism pleases the misoneism of the mediocre, whence the enthusiasm over platitudes and the reign of the philistine in newspaper art, literature and science, and whence the frequent repetition of Horace's epigram.

A "sport" is a marked sudden departure from the type. But is genius such a departure? The great man, according to Herbert Spencer,* along with the whole generation of which he forms a part, along with its institutions, language, manners and its multitudinous arts and appliances, is a resultant. The genius of the great man depends upon the long series of complex influences which have produced the race in which he appears and the social state into which that race has grown. All those changes of which he is the proximate initiator have their chief causes in the generation he is descended from.

This is the evolutionary view and it practically disposes of the "sport" and the occultly morbid notion of genius. That all the biologic facts advanced by Lombroso Huxley can be explained along this line, a brief examination will demonstrate.

Slow accretion, as an article on Idiosyncrasies† several years ago demonstrated, is sufficient to produce all the phenomena of genius and evidences are found of such accretion. The Elizabethan epoch was one of giants in all departments of human thought. Shakespeare does not stand

*Principles of Sociology.

†"Mind," 1884.

alone. There is a galaxy of thinkers—Ben Jonson, Willis, Helkiah Crooke, Beaumont, Fletcher, Ford, Marlow, Greene, Drake, Bacon, Raleigh, Spencer and Sidney are sufficient to recall this fact. Shakespere and these owed much to the Italian renaissance.* Shakespere's adaptation of Greene's novel, "Pandousta," into the "Winter's Tale," drew forth Greene's denunciation of a "miserable shakescene decked out with our feathers." Indeed, the whole age and, that preceding and succeeding, is replete with intellectual stir. The influence of these factors of evolution has been fully recognized by Macaulay when he says that Bacon's intellect in an age of Scottists and Thomists would have run to waste, as did intellects no less great. Scott was the typical Lowland Scotchman of his period. The transition to Scott is easy from the pithy humor and songs of numberless Anglo-Celtic Lowlanders.

In the biologic phase there are two standards, as Havelock Ellis† remarks. The first is constituted by the child and its anatomical and physiological characteristics. The second is constituted by the characters of the ape, the savage and the aged. The foetal evolution which takes place sheltered from the world is in an abstractly upward direction, but after birth all further development is merely a concrete adaptation to the environment, without regard to upward zoological movement. The infant ape is higher in the line of evolution than the adult, and the female ape, by approximating to the infant type, is somewhat higher than the male. Man, in carrying on the line of evolution, started not from some adult male simian, but from the infant ape, and in a less degree from the female ape. The human infant bears precisely the same relation to his species as the simian infant bears to his, and we are bound to conclude that his relation to the future evolution of the race is similar. The human infant presents in an exaggerated form the chief distinctive characters of humanity—the large head and brain, the small face, the hairlessness, the delicate bony system. By some strange confus-

*Roscoe, in his "Italian Novelists," points out Shakespere's debt to these.

†Man and Woman.

ion of thought we usually ignore this fact, and assume that the adult form is more highly developed than the infantile form. From the point of view of adaptation to the environment, it is undoubtedly true that the coarse, hairy, large-boned and small-brained gorilla is better fitted to make his way in the world than his delicate offspring, but from a zoological point of view, we witness anything but progress. In man, from about the third year, forward, further growth—though an absolutely necessary adaptation to the environment—is to some extent growth in degeneration and senility. It is not carried to so low a degree as in the apes, although by it man is to some extent brought nearer to the apes, and among the higher human races the progress toward senility is less marked than among the lower human races. The child of many African races is scarcely, if at all, less intelligent than the European child, but while the African as he grows up becomes stupid and obtuse, and his whole social life falls into a state of hide-bound routine, the European retains much of his childlike vivacity. And if we turn to what we are accustomed to regard as the highest human types, as represented in men of genius, we shall find a striking approximation to the child types.* Figure 1 shows what the child should become and what it actually becomes by sacrificing to the conditions. The child is not an undeveloped man, but man is an imperfectly developed child. Man, as I have elsewhere pointed out, is a compound animal in whom certain structures have their own nervous system and their own life, but under control of the central nervous system. Man is an aggregate whose internal actions are adapted to counterbalance its external actions.† Preservation of its movable equilibrium depends upon its development and the requisite number of these actions. Movable equilibrium may be destroyed when an action is too great or too small and through deficiency or need of some organic or inorganic factor in its surroundings. Each individual can adapt itself to these changeable influences in two ways;

*Talbot: *Developmental Pathology*.

†Herbert Spencer: *Principles of Biology*.

either directly, or by producing new individuals which will take the place of those in whom the equilibrium has been destroyed. Since the forces preservative and destructive of the race cannot counterbalance each other, the equilibrium must establish itself in an orderly way. Since there are two preservative forces—the impulse of every individual to self-preservation and the impulse to the production of other individuals—these must vary in an inverse

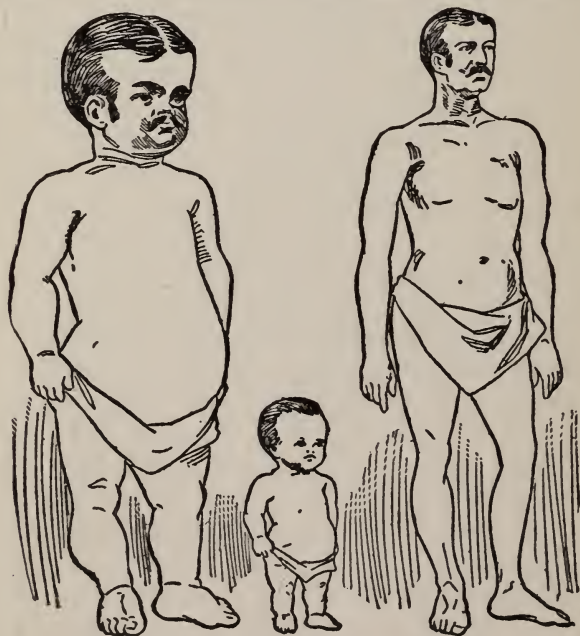


Figure I. Child Potentiality (Talbot.)

ratio. The former must diminish when the latter augments. These two forces are therefore necessarily antagonistic. In the evolution of the compound organism, cells and structures have surrendered their reproductive powers for the benefit of the whole organism. Through what A. H. Thompson calls suppressive economy, local degenerations hence occur for general benefit.

The embryonic history of lower invertebrates is essentially that of the human organs. Vertebrate embryos, all of common type at their origin, assume successfully many

common forms before definitely differentiating. Supernumerary organs exist in these common forms at one phase of embryogeny. For these reasons repetition of teratologic types occur in vertebrates. The higher vertebrate embryo, moreover, contains in essence the organs and potentialities of all lower vertebrates. Under the influence of heredity or accidental defect, an organ, structure, or function constant in a species may be lacking or excessive in an individual without distant atavism being involved. Varying conditions stimulate these embryonic potentialities at the expense of the later acquired and more typical human organs. Thus results a struggle for existence between organs and structures, early observed by Aristotle, Goethe and St. Hilaire, but fully demonstrated by Roux* two decades ago. He, while admitting determination by heredity, shows that there are surrounding forces necessary, not simply the condition of activity by an essential element of the final product. The contrasted views of Weissmann and Goethe are thus harmonized by the existence of an internal or physiologic struggle for existence between the organs, the cells and the protoplasmic molecules, of the organism. The principle back of development of tissues and organs is overcompensation of what is used.

This permits self-regulation and is a necessary precondition of life. Living matter, unlike inorganic, presents an external continuity despite change of conditions. To effect this assimilation must always be in excess (overcompensation), for if less than consumption, the organism comes to an end of itself. If equal conditions result, change and nourishment will fail or injurious events will cause destruction. Continuance can only be assured when more is assimilated than is consumed. Fire, for example, assimilates more than it uses—*i. e.*, it always has energy left over to kindle new material. Fire would (like life) become eternal did it not use up material quicker than other processes can make it.

In the same way organisms assimilate more than they can consume, but they do not turn all they use to assimilate

*Die Kampf der Thiele in Organismus.

lation; energy remains over by which the process performs something. This work product controls the excessive assimilation which otherwise would come to an end by not having sufficient material to assimilate. The more complex processes of life are hence essentially a radiation of assimilation* which is similar to, but not identical with combustion, the load which it carries favoring its continuity. This radiation, load, or work-product becomes directed by natural selection to keep up a supply of food primarily by moving the assimilating mass. Performance of function over and above assimilation is just as necessary a condition of continuous assimilation as assimilation is of performance. On the other hand, there comes to be an inverse relationship between growth and production (within limits), and capacities result which, although they use up material, do not in themselves increase assimilation.

The course of development consists in properly directing this work-product. This so far represents merely a continuous productibility of function in connection with assimilation. A productibility which is stored up and discharged by an outer stimulus of environment will be more economic and will give rise to what is called reflex excitability. When the reflex work-product dominates, according to circumstances, function will sometimes be greater and sometimes less. If, under these conditions, assimilation keeps on continuously, there must sometimes be an overplus, sometimes a balance, and sometimes an excessive function, death, and thus elimination. To avoid this last it is necessary that assimilation should depend upon use or upon a stimulus which use calls forth. From the psychic side stimulus is recognized as hunger.

This process where stimulus is an indispensable factor is more special and limited than the more general process of assimilation plus movement, etc., but has characteristics which favor it greatly in the struggle for existence. Connected with the most complete self-regulation of function is the greatest saving of material. While parts according to their use are strengthened and grow, the un-

*Scott: *American Psychologic Journal*, 1888.

used degenerate and the material for their substance is saved. This kind of process unites the greatest economy with the highest functioning of the whole, but at the cost of the independence of the parts. Senescence becomes thus a result in differentiation, in which the parts exist merely on account of the function which they perform for the whole. The senescing organs, under the suppressing phase of the law of economy of growth, wither and even descend in this condition from generation to generation, which fact often allows a fresh start in development. During the course of a lifetime the organism moves from a more general, more easily impressible condition to one more perfectly mechanized. Through a long period it becomes, by the continuous working of a given stimulus, more completely adapted to itself, more differentiated, and thereby more stable, so that an always increasing opposition is formed to the additional development of new forms and characteristics.

This law of economy of growth governs the relation of the organs to each other and the operation of the process whereby one structure is sacrificed for the development of another. Since* certain parts in the evolution of organs disappear, and in the evolution of organisms certain organs through suppressive economy, and since the disappearing and developing tendency of necessity centers around the time when certain functions are to be lost by the disappearing, and others gained by the developing, periods of stress occur around which the law of economy of growth centers the struggle for existence between parts of organs and between organs themselves. It is because of this that physiologic atrophies and hypertrophies and their reverse occur. Nearly all conditions of physiologic disturbance may result at these periods of stress from the influence of maternal nutrition or environment, or of hereditary factors.

In intra-uterine development, the disappearing and developing tendency is peculiarly well illustrated in the embryogeny of the genito-urinary system, which in all verte-

*De Moor: *Evolution by Atrophy*.

brates contains rudimentary organs. The first stage in the formation of the kidney system is the pronephros, which consists of intricate canals opening into the body cavity at the point where the glomeruli are formed on the subintestinal vein. These canals originally had apertures to the exterior. Later on they became connected with one excretory canal opening into the cloaca. The primitive genital gland was situated close to the pronephros. In process of embryogeny the mesonephros, at first distinct from it in origin, replaces the pronephros. The mesonephros in appearance (a secretory urinary gland with its secretory canal, segmented duct) closely resembles the pronephros. The urinary system thus formed continues to be closely connected with the genital gland, the discharging canal of which passes through the mesonephric kidney to find exit through the segmental duct. During the mesonephric stage Muller's duct forms, starting from the cloaca and opening out into the general body cavity. The mesonephros does not become the permanent kidney. In course of embryogeny the metanephros (the permanent excretory gland) develops. This development is attended by important modification; further instances of degeneration occur and fresh organic connections are established. In the male the mesonephros begins to atrophy. The part connected with the testes is transformed into the epididymis and the vas deferens. The remaining part atrophies. When the permanent organization is attained, the atrophied part persists as a paradidymis and a hydatid—organs without functions in the adult state. The discharging canal, which during the mesonephric stage is common to both urinary and genital glands, remains simply in connection with the testes and then becomes the vas deferens, the terminal extremity of which (the cloaca having disappeared) becomes gradually individualized. The permanent kidney is connected with a fresh canal—the ureter formed by degrees at the expense of the primitive discharging canal and subsequently separated from the latter in order to empty itself into the bladder. Muller's duct, which first increases in size, proceeds at a certain stage to atrophy until all that remains

are the distal and proximal extremities in reduced organs (the hydatid of Morgagni and the male uterus), neither of which is functional. The intervening part of the duct remains to form the canal of Gasser. In the genito-urinary male apparatus therefore occur, when adult: organs which have come into existence at different times, but which have retained their original functions—the testes, the kidneys (metanephros), and the ureter; organs which are functional, but of which the ultimate function differs from the original—the epididymis and the vas deferens; reduced organs, vestiges of what were formerly active organs—the hydatid and the paradidymis; reduced organs, vestiges of Muller's duct which becomes active only in the female—the hydatid of Morgagni and the male uterus. Kidney development in the female is similar as to physiologic atrophy and hypertrophy. In that part of the mesonephros connected with the genital gland and the corresponding discharging canal, the canal as a rule disappears. Exceptionally it forms Gartner's duct. The lower part persists in a rudiment (Weber's organ); the upper part becomes reduced to a small tissue which surrounds the paraovarium and the paraoophoron—vestiges of the former mesonephros. Muller's duct becomes considerably enlarged, forming the vagina, the uterus, and the Fallopian tubes. At the upper end it is connected with the hydatid, a vestige of the mesonephros. The genito-urinary female apparatus contains some organs, the functions of which remain unchanged—the ovaries, the permanent kidney, the Fallopian tubes, the uterus, the vagina, and the ureter; and some rudimentary organs (vestiges of once active organs)—the paraovarium, the paraoophoron, hydatid, and Weber's organ.

The liver has undergone similar changes, being an older organ in the ontogeny of vertebrates than the heart. Embryologically and morphologically it is composed of two distinct parts, one related to excretion and the other to secretion, assimilation, sanguifaction, and metabolism. These parts are first a branching system of epithelial gall-ducts, and secondly a network of hepatic cylinders. During the second month of fetal life the liver is relatively

enormous; during the third month it fills the greater part of the abdominal cavity. After the fifth month the intestines and other viscera overtake the liver; still the liver of the child at birth is twice the size of that of the adult. Immediately after birth the liver diminishes. The right lobe, always larger than the left, increases in predominance after birth. Very early in fetal life the liver becomes the principal seat of blood formation. As Claude Bernard has shown, the glycogenic function of the liver begins in the embryo. After birth the nutritive function of the liver becomes subservient to the excretory function. This is shown by the atrophy of the hepatic cylinders described by Toldt and Zuckerkandl. Arrest of development at certain times would produce the diabetic states so fatal to children. Such arrest may result from premature senescence, from strain arising before but evinced during the first dentition, or from effects of constitutional disorders at early periods of stress. While the liver does not entirely lose its originally great sanguifactive powers, still these proportionately decrease with the evolution of the rest of the sanguifactive system in the embryo.

One possibility of the suppressive phases of the law of economy of growth is the production of cerebral states analogous to those produced in animals so far as the encephalic basis is concerned. The neuron passes successively through stages corresponding to those which are to be found in the adult fish, frog, bird, and mammal. In this case development consists in an increasing complexity of the cell with no formation of unnecessary rudimentary parts. Its ontogeny in man usually repeats in modified form the main ancestral stages. This is peculiarly evident when the cerebral development of man is compared with that of the vertebrate series.

In fish and batrachia (ichthyopsidæ) the cerebral hemispheres do not cover the region of the third ventricle from which the eyes arise (thalamencephalon). In the human embryo of the seventh week, same.

In reptiles and birds (Sauropsidæ) the hemispheres cover the thalamencephalon, but leave uncovered the region

through the period of growth and senescence rapidly. Besides such obvious evidence of arrested development, minor expressions (such as the senile children described by Talbot* and Souquest†) occur. This may involve the skin alone, the rest of the system being comparatively unaffected. The truth of the popular opinion of precocity (early ripe, early rotten) is illustrated very frequently. Cratemus, a brother of Antigonus, was an infant, a youth, adult, married, begat children, and senile in seven years. Louis II. of Hungary was crowned in his second year, at fourteen had a complete beard, at fifteen was married, at eighteen had gray hair, and at twenty died. A ten-year-old boy, reported by Rhodiginus, impregnated a female. A boy born in 1741 had external marks of puberty at twelve months, and died senile at five years. Of six cases of early puberty in boys cited by Gould,‡ one viril at one year, died senile at five years. Cazeaux reports the case of a girl who menstruated at two, became pregnant at eight, and a grandmother and senile at twenty-five. Another child of three, with the breasts of a woman and genitals of a nubile girl, had a senile appearance. She menstruated regularly at two. In a case described by Woodruff a girl regularly menstruated from two years, and at six years was tall, with well developed breasts and a hairy mons veneris. In a girl reported by Van der Veer menstruation began at four months and continued regularly for over two years. She had the features of a child of ten. The labia majora and minora were well formed, and the mons veneris was covered with hair.

Premature senility may evince itself in atheroma of the arteries at the periods of extra-uterine stress. This has been observed rather frequently in the children of vegetarians and after the essential fevers.

Sex, as Drusing's biologic studies have shown, is not inherited, but is the result of various factors acting not only at the time of impregnation, but at various times

*Dental Pathology: Talbot.

†Degeneracy: Its Causes, Signs and Results.

‡Gould's Anomalies.

§*Progres Medical*, July 15, 1888.

light has been lost, and before the organ has been far reduced by phylogenetic destruction, a veil of black pigment is formed over it, completely shutting it off from outer light. The nerve disappears completely before birth, its degenerate cells becoming lost in the mesoblastic skeletal tissue of that region. At the time of birth the whole eye is enclosed in a thick membrane which isolates it. The deposition of pigment has destroyed any functional activity in the lens and retina, but these parts none the less retain traces of a complicated structure recalling their condition when functional.

Similar stress has at the proper period, arrested development of brain types in idiots at stages like the brains of *Sauropsidæ* (bird and reptilian type).

The fetal periods of stress of the human organism which most deserve attention are those of the senile (or sinnan) (Figure II) period of intra-uterine life (which

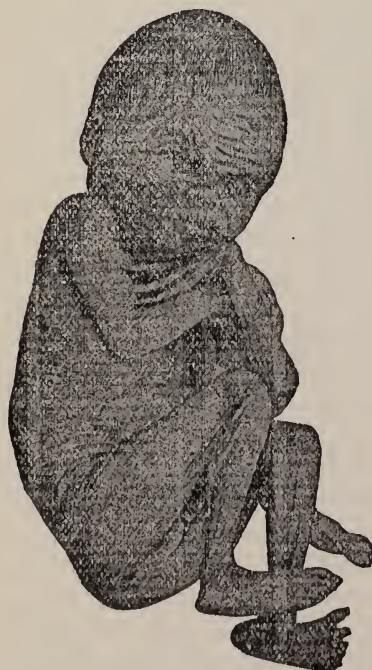


Fig. II.

occurs about four and a half months after conception) and the period of sex differentiation. Arrest at this period of senile intra-uterine development, through any of the processes which check development, may exercise peculiar influences on the extra-uterine development of the child. When produced by syphilis (which so frequently causes the senile appearance of new-born children) the child, because of organs which have undergone premature senescence, fails to pass through the first dentition, or readily falls a victim to secondary infections. Precocity, whether of the intellectual

or physical type, is an expression of arrest of development at the senile period which causes the child to pass

of the optic lobes (mesencephalon). In the human embryo of the middle of the third month, same.

In mammals the hemispheres cover the thalmen-cephalon (cerebellum and medulla) and the olfactory lobes. In the human embryo of the fifth month, same.

In some mammals even of higher orders (*e. g.*, some Hapalidæ) the hemispheres are smooth. In the human embryo of the middle of the fifth month, same.

Arrested development of the neurons would imply imperfect power of association and consequently imperfect potentialities for education.

As the power of passing through the fetal period of stress will depend on the condition in which the fetal organism is at the time of the period of stress, and as this condition of the fetal organism will depend partly on factors inherited and partly on the maternal condition, it must be obvious that defect in either at these periods of stress may so disarrange the struggle for existence between the fetal organs that reversionary conditions will gain the ascendancy.

This is true of even such grave conditions as cyclopia, in which the pineal body becomes an actual eye, as in certain lizards like the sphenodon; while the structures of the embryonic eyes normal in men disappear. In the lizard the pineal eye passes through the following stages of development: Formation of a hollow outgrowth from the roof of the third ventricle of the brain. This little sac elongates, changes its direction, and becomes divided into a proximal and distal portion. The cells lining the distal part farthest from the brain become differentiated into the cell which will form the lens, and the cells which will form the retina. The distal parts become specialized; the lens, the retina, and the stalk of the optic nerve are mapped out. The lens, the retina, and the optic nerve become fully formed. At this stage the third eye has reached its limit of development. There is a well formed retina connected with the brain by a special optic nerve. The organ projects strongly from the surface of the head, but from this point, owing to the development of the cerebral hemispheres, degeneration begins. The nerve becomes broken and fatty, and pigmentary degeneration occurs in it. At the same time the pineal eye having become useless or even harmful to the animal possessed of it, before the power of receiving "perceptions of

thereafter. Long after impregnation, when the embryo is already developed, nutrition is still influential and may change the tendency even after the sexual organs have developed. Poor maternal nutrition may arrest female development, causing reversion to the male type. The psychic side of sexual differences should normally, as it often does, remain undifferentiated until adolescence. Adolescence is affected by the atavistic tendency to simian senility, which implies its early onset. This psychic side in the sex is ignored, yet the instincts which are transmitted from generation to generation (especially those so fundamental and universal as the reproductive instincts) may appear even where there is congenital absence or rudimentary development of organs upon which the manifestations depend.* The psychic manifestations of the sexual appetite may remain indifferent until adolescence, like the indifferent type of sexual organs may be of homosexual type (to the same sex), of heterosexual (to the opposite sex), or may be hermaphroditic (both sexes.)

Three conditions (infantilism, masculinism and femininism) and a mixed state may result from arrest of development before, at, and after sex differentiation in intra-uterine life. As the inferior organs and sex nerves are differentiated ere the psychic phase, this side of sex may be determined only in extra-uterine life. Practically all three are arrested developments of child potentialities.

(To be continued.)

*Barrus: *American Journal of Insanity*, 1895.

THE TRAMP AS A SOCIAL MORBIDITY.*

By HARRIET C. B. ALEXANDER, A. B., (VASSAR) M. D.

Fellow Chicago Academy of Medicine, Member International
Medical Congress 1906, Physician to Internal Medicine
Department Mary Thompson Hospital.

MEDICAL demography, dealing with state medicine and state hygiene from the view-point of society organization, necessarily takes the tramp, as a social morbidity, under its purview. This morbidity involves the questions of diagnosis, causation and remedy.

Accepting the everyday conception, the tramp is a social parasite, which, while in part the result of social forces, like tolerance of begging, like great wars, like sudden destruction of industries, (by financial revolutions or by machinery) is very frequently also the product of congenital tendencies, aided by bad environment during growth stress, as well by breakdowns from nervous and other protracted diseases. The tramp's wandering tendency is a return to primitive nomadism. The petty thefts and other anti-social tendencies are an expression of the spirit which makes the negro conscienceless as to the hen roost of the white.

Vagabondage, the salient characteristic of the tramp, is anti-social but wandering tendencies are not necessarily vagabondage.

"Home keeping youth
Have ever homely wits,"

remarks Shakespeare and the term 'journeyman' preserves the old value set upon wandering as a training. The German *Wandenzahr*—for 'journeyman year' tells the tale more strongly. The English-speaking race has developed because of its wandering tendencies.

*Read before the Oivic Conference of the Reform Department Chicago Woman's Club, Oct. 15, 1904.

Vice and virtue, disease and health, always shade into each other and where one ends and the other begins must be determined by relative, not absolute tests. At the outset of tramp medical demography such tests are demanded for demarcation.

Tramps include, according to Josiah Flynt,* "out-of-works" and "hoboes," which last are the parasitic or anti-social class. Both "out of works" and "hoboes" include several types; some verging on the sociologic norm, some trenching on the criminal and some approximating the morbid. The last type implies that there is evidence that wandering tendencies may proceed from disease or defect.

Certain forms of insanity so notoriously produce wandering tendencies that their victims are called errabund lunatics. The degenerative and acquired types of suspicious delusion are notoriously errabund. The periodic, hysteric and epileptic insane are likewise errabund, as are also paretic, secondary and senile dement.

The restlessness born of nerve tire and lessened checks on excessive energy in neurasthenia likewise causes errabund tendencies. The nerve breakdowns of puberty and adolescence through transmutation of the normal activity of childhood, youth and early manhood, have the same effect.

The tramp classes therefore contain morbid elements to an enormous extent. This is very strikingly shown in the late researches of Willmanns,† of Heidelberg, who found that of 120 old professional tramps sent from jails to an insane hospital, there were but 27 that had escaped the workhouse. The number of sentences was high, some having a hundred or more. There were 66 cases of puberty breakdown; 19 of epilepsy; 6 of hysteria; 5 of paranoia; 4 of periodic insanity; 3 of imbecility and one of cretenism. There were 7 alcoholic dement, 4 paretic dement, and 1 luetic dement. In other words, 104 of 120 cases of insanity among tramps were of long existing, unrecognized types.

The cases were divisible into three groups. Patients in the first group were originally sound, mentally and phys-

*Ellis: Sexual Inversion, Appendix I.

†Neurologisches Centralblatt, Dec. 15, 1903.

ically, with proper social tendencies and leading orderly lives until after the close of adolescence, when a nervous breakdown occurred and they became tramps and outcasts. The second group consists of normal persons who suddenly or gradually, without recognizable cause, adopted an unstable, irregular errabund life. The third group is composed of unbalanced degenerates, who early in life, evinced moral imbecility, could not be schooled or trained to a trade, but started on a career of vagabondage.

Does the existence of these groups justify the creation of a tramp type? Anthropometric measurements indicate that the tramp class has merely characteristics common to the congenitally defective. The skull type does not differ from that of the races to which the tramp belongs. Dental and cranial anomalies approximate closely in number and kind to those of the harlot class.

Harlotry and hoboism are mental and moral defects taking lines of least resistance in an "ego" of primitive type. The hobo combines the restless wandering tendencies of the neurasthenic and suspicious degenerate with the parasitic tendencies of the pauper and the egotism of the moral imbecile. He therefore fuses several degenerative types, while most approximating the harlot pauper, as found in Bridewell, workhouse and almshouse.

The percentage of puberty breakdowns and the percentage of congenital defectives, like that among harlots, is greater among tramps than among criminals.

All moral, intellectual, sociologic and physical expressions of birth defect occur in tramps. These, under the law of heredity transformation occur in all buds of the degenerate tree. Pauperism, harlotry, insanity, hysteria, idiocy, moral imbecility, and haemophilia occur in the same family and present the same physical stigmata.

Besides congenital defects, tramps, as shown by Willmann's analysis, present morbid factors acquired after birth. Alcoholism, like the vagabond tendency, is very frequently an effect, not a cause. Those who have been sunstruck, have sustained skull injuries, or have met with railroad accidents, become intolerant of alcohol.

Sunstroke, skull injury and railroad accidents suffice by themselves to produce suspicious errabund states. A large proportion of the suspicious insane who reach insane hospitals through almshouses are of this mixed origin—alcoholism, sunstroke, skull injury, and railroad accidents. Tramp breakdowns far from rarely occur among firemen, stokers, stationary engineers, cooks and those exposed to great heat. Exposure of Americans to tropical climates must of necessity, for this reason, increase the tramp class. The influence of institutionalism in making the class parasitic is at once evident.

What is true of skull injury, sunstroke and railroad accidents is likewise true of protracted invalidism, which always tends to parasitic mentality. Patients for this reason are often pauperized by hospitals and henceforth live on the community. Medical charity is therefore a great factor in the production of "hobo" tendencies.

The great fevers produce, at times, permanent change in character by which the patient's relations to his surroundings are changed in a degenerative direction.

Periods of financial and other stress shock many into apathy, inevitably tending to parasitism likely to be errabund. The restlessness of the bankrupt merchant is an old proverbial observation.

The sex factor in the production of "hoboism" markedly looms up in the fact that but 1/10 of Willmann's cases were women. As one-half of these were puberty breakdowns, it is easy to see how the breakdown led to indiscretions and indiscretions to outlawry. The percentage of women tramps in standing army countries is greater than in the United States. Woman being altruistically built, is of necessity, the great preserver of social institutions. She maintains the type from which man ever tends to depart. In primitive society, man as hunter, fisher and warrior was the nomad, while woman was the home-builder, artisan and agriculturist. When militarism declines man approximates woman, but tends more to nomadic tendencies, whence the tramp tendencies after great wars.

The remedy for vagabondage universally popular is that of Dogberry: "You shall comprehend all vagrom men." This remedy has proved a source of the very evils it proposes to cure. It is obvious from Willmann's figures that strain at adolescence plays a large part in the ethical breakdown of the tramp. Child labor looms up here as a potent factor, as European sociologists and poets have repeatedly pointed out. If this labor be such as exposes the child to unhygienic surroundings (glass houses, match-making, fur-pulling, sweat shops and lead grinding) suspicious errabund states readily occur. Struggle for school standing is a fertile source of puberty breakdown, especially since mechanical teaching has become the vogue.

Medical charity, like all charity, indiscriminately administered, creates the mind which believes Society owes it a living.

The hobo problem in the United States is largely of European creation since before the revolution the bond servant system introduced an enormous population of defectives which, through contract labor up to the days of emigrant restriction, was constantly increased. Owing to such restrictions the burden of the defective classes has greatly increased in Europe of late.

The influence of labor conditions in producing the tramp include not merely strikes, lock-outs and black lists, but likewise the dangerous trades. The steel industries cause an undue proportion of nerve breakdowns, as do the mining and all industries where accidents are a probability. Lead industries produce suspicious states. The same is likewise the case with industries where dust is a constant factor.

One social danger from tramps is that of homosexuality in boys decoyed from home. The tramps gain possession of these boys in various ways. A common method is to stop for awhile in some town, and gain acquaintance with the slum children. They tell these children all sorts of stories about life on the road, how they can ride on the railroads for nothing, shoot Indians, and be "perfeshunnels" (professionals), and they choose some boy who especially

pleases them. By smiles and flattering caresses they let him know that the stories are meant for him alone, and before long, if the boy is a suitable subject, he smiles back just as slyly. In time he learns to think that he is the favorite of the tramp, who will take him on his travels, and he begins to plan secret meetings with the man. The tramp continues, of course, to excite his imagination with stories and caresses, and some fine night there is one less boy in the town. On the road the lad is called a "prushun," and his protector a "jocker." This condition, however, occurs among the boys who usually otherwise find their way into the reform schools of the various states and cities. Among these, as Hamilton Wey of Elmira, New York, Randolph Winslow, of Baltimore, Md., and Kuflewski, of Chicago, have shown, homosexuality frequently occurs without outside suggestion.

What, therefore, are the social remedies for the medical aspects of vagabondage? First and foremost comes the prevention of congenital defects; as most of these defects are potentialities rather than actual existences they can be largely corrected by proper environment before birth and during the periods of growth stress. Among proper environment is sanitation of residences and of food, water, dress, etc. Even slight improvements in sanitation effect remarkable results. A very slight improvement in a tenement house system in New York begun in 1881 had resulted in 1891, not only in an enormous decrease in infantile mortality, but the saloons in the districts affected decreased one-third. Improper food during childhood and youth is the source of suspicious breakdowns like those of dyspepsia in the adult. Impure water causes greatly debilitating diseases like typhoid fever, with, as a consequence, neurasthenia and brain artery change. While most great fevers are of germ origin, the germ needs a soil, which sanitations weeps away.

One remedy suggests itself for the labor phase of the tramp problem—increased belief in the mutuality of contracts on the part of employer and employed. Importation of defectives for labor purposes requires more stringent supervision

since, as shown by Willmann, the suspicious and periodic insane long pass muster.

More rigid inspection of workshops and rolling mills and greater damages for personal injury would cure the accident evil. Society has created its vagabonds, as it has created other defective classes. When it alters favorably the environment of its youth the creation of defectives will markedly diminish.

THE ENTONING OF THE NEURONES IN THE PRACTICE OF MEDICINE AND SURGERY.*

By C. H. HUGHES, M. D.

St. Louis, Mo.

THE entoning of the neurones means the sustaining and rebuilding of the sources and the final conservation of nerve center energy. The psychic neurones, occupying the highest place and exerting the greatest influence in the neuraxis, may be impressed on automatically evolved thought. A word fitly spoken to the patient, an auto or an external suggestion from another and healthier and more active brain and mind; or from an enviroing influence, such as even a picture on the wall, cheerful or depressing as the case may be; a well or illy-digested or a predigested meal, agreeable or disagreeable to the taste or appetite; a primavia clogged or freely opened, a torpid liver, congested or freely acting, or other disease oppressed, or wrong acting viscera or emunctory, and these impressing the higher or central presiding neurones exalt or lower their vital activity as the case may be, and contribute to the relief and hopeful exaltation or more or less hopeless oppression and depression of the man through his psychic and other neurones and the organs they influence towards convalescence or fatal functioning and *vice versa*.

These neurones in their functioning are the higher powers of the organism through which the masterful *vis medicatrix* of the human economy builds up or destroys.

In my earlier experience as an army surgeon I have marvelled at the varying results of insignificant and grave gunshot wounds received under apparently similar circumstances and environment of the men; the hopefully psychic

*Read at Hot Springs Meeting Mississippi Valley Medical Association.

neurone entoned one with the grave penetrating abdominal wound recovering, the hopeless psychically depressed and despairing, speedily dying, though treated in a similar way externally, are illustrations in point from clinical experience, especially our own in the days when we practiced surgery.

These unexpectedly variant results made in my earlier days a profound and searchful impression, and I have sought ever since for a revelation of the underlying cause thereof. And the cause has come to my knowledge, as it has to others, in the entoning or the reverse of the central neurones that contribute to the makeup of the neuraxis and the man. Our predecessors in the healing art saw less clearly than we do in the light of present-day psychoneurological illumination and the opsonic index, but they discerned it in the dynamia or [adynamia of the strong or feeble *vis medicatrix naturæ*, and believed in its existence, though in more restricted sense than is now demonstrable. But so far back as in the days of Cullen the view of the marked influence of the nerve centers, though not then so well known as in our day, over the processes of disease was accepted, for he said that "from all that he could see of the movements of disease they might in a manner be called nervous." This view for a time obscured the humeral or blood pathologists, and was later penumbrated further by the omnipresent bacteriological explanation as the causes of nearly all morbid action now somewhat on the wane, for these are causes and conditions of the coming of the bacteria.

Neural influences and relations are found in the organism which makes even the bacilli and bacteria fail or flee before them. The mysterious yet demonstrable exaltation, acceleration, retardation or depression or suppression of function, as in the cardiac, respiratory or intestinal effect of certain emotions, the *Kloptversacht* experiment of Golz with his frogs; the apepsia through descending vagus influence, the cardiac arrest through the same influence once too often attempted, by Colonel Townsend's self-experiment; the influence of the diabetic center in the floor of the fourth ventricle of the brain and its influence on

abdominal viscera, the tachycardia, bradycardia, etc., through various involuntary emotions, all remind us of the importance of entoning and promoting the stability of the higher neurones of the cerebro-spinal axis in the management of disease, and in the promotion of its cure, yet we often overlook these demonstrable facts and well-known relations between disease processes and the neuronic and psychoneuronic instrumentalities and helps toward cure, notwithstanding the proofs that sometimes also come before us from empirical non-medical sources, as in the mind and faith cures innumerable, etc.

The lesson of all this, not to make this essay too prolix, is that there is a therapy favorable or adverse in all we say or do to or for the patient, and that we should look well to the entoning of the psychic neurones and guard against impairing their potent power by allowing no depressing lodgment of despair in the patient's mind while treating him, by discoursing of the recovery and not the death of others similarly afflicted, by permitting no pessimistic visitors or nurses to talk of the shroud and the hearse, and those like afflicted who have filled them; to promote ample rest and reasonable cheerfulness of mind in the patient and those who visit him; to avoid overtax of neurone energy and secure as much sleep, mental tranquility and nerve center repair as possible in every case; to save the centers from all possible toxine damage, whether in medical or surgical cases, whether auto-toxin or poison from without. We should avoid the long, taxing visit, the so-called candid but cruel discussion, pro and con, of chances for recovery in the patient's presence; the display of hideous keen-cutting surgical instruments before the anæsthetic is administered; the flourishing of the hypodermic needle or too slowly using it; the long brain taxing, sometimes alarming explanations of possible procedures for relief. In short, when disease has prostrated the patient and nature pleads for help for all the controlling centers of vital action, let us harken unto the voice of *vis medicatrix naturæ* and obey it in the entoning, reconstructing, tranquilization of the higher central neurones, that can do so much to aid and much, also, if wrongly treated, to harm our patients.

Whatever view we now or may ultimately hold of the neurones, especially the cerebro-psychic complete cell, whether we shall continue to hold the present general, though mooted, Cajalian view of its independent, though juxtaposed and intimately related cell anatomy, or accept the recent cytological criticism as correct and go back to former or on to a newer morphography of cell morphology, my plea is for the paramount care of the neurones, especially those which are aggregated in the construction and function of the neuraxis.

In every case of disease I would seek, as now, a correct localizing diagnosis, and minister to the organ, viscus or special system; but I would exercise, in addition, a watchful care over the tone and integrity of the nervous system, especially in its higher central neurones. In short, I would treat the whole man as well as the special spot or organ claiming attention. I would endeavor to keep the neurones well entoned and thus save the patient through those psychically sustaining influences in addition to coarser medication, which has sometimes saved him in other and unscientific hands, acting under the supreme confidence of ignorance, without medicine. We have a double armamentarium at our command if we combine real and true psychic rest and hope with our chemical reconstruction and nerve center therapeutics. The right acting neurone is the physiological unit of organic integrity and power; when it fails, anatomical pathology begins. For salvation of the patient conserve his neurones.*

*A more elaborate yet not complete presentation of this view, as I hope yet to have opportunity to make, may be found in my first book on the "Neurological Practice of Medicine."

A PSYCHOLOGICAL MEDICO-LEGAL STUDY. THE CASE OF WILLIAM RODAWALD.

BY G. F. ADAMS, M. D.

KENOSHA, WIS.

WE READ in the public print of the "Crime of Amalgamated" and high finance. Public speakers and editorial writers tell us that the country is money mad. We are almost daily startled by reports of criminal acts committed by people heretofore law-abiding, many of whom have enjoyed a state and national reputation as trusted citizens. We have had startling examples in our immediate vicinity during the past year. For instance: The Bigelow case at Milwaukee, the Dougherty defalcation at Peoria, and in Chicago we had the Bank of America.

This leads up to the question: Why do men and women commit crime? To be able to consider this question at all, we must know not only the details of the criminal act, but we must know more. We must be familiar with the normal mental state of the criminal, and the environment that surrounded the law-breaker prior to his or her departure from the straight and narrow path.

After the crime has become a public act, and the law steps in to prosecute, we have only too frequently the defense—insanity. In cases of this kind, the professions of law and medicine must work together to justly determine the question of responsibility, so that society shall be protected, and the majesty of the law upheld. How this was done in the case of William Rodawald will be the Medico-Legal part of this paper.

The crime for which William Rodawald paid the full penalty of the law was committed in the village of Salamanca, N. Y., April 7th, 1903.

At that time I was connected with the New York State Hospital service. Ten days after the murder I received the following letter from the Dist. Attorney.

Office of the
George W. Cole, DISTRICT ATTORNEY
District Attorney. of Cattaraugus County,
Salamanca, N. Y.

SALAMANCA, N. Y., April 17th, 1903.

DR. G. F. ADAMS,
Gowanda, N. Y.

Dear Sir:—

A murder recently occurred at West Salamanca in this County, in which William Rodawald, a German, or Polander, shot and instantly killed a young man by the name of Jesse F. Bayer. I apprehend that the defense will claim that Rodawald was insane, although I have known him for some time, and know him to be simply a high-strung, vicious man, with an ungovernable temper, and *no disposition* to control it.

I think it would be well to have him examined now by an expert alienist, and if that defense is set up, to have such testimony at the trial, which will doubtless occur the latter part of May or the latter part of June. If I desire, would you come to Little Valley (where Rodawald is confined in the jail) and make an examination quite soon, when notified, and would you testify at the trial, if your testimony should be of service to the prosecution after making your examination?

Kindly let me hear from you, letting me know if you will make the examination, and if you will be at liberty to be a witness if desired.

Yours very truly,

G. W. COLE,
Dist. Atty.

My reply to this letter was a provisional acceptance that Dist. Attorney Cole met more than half way. I told the District Attorney that I would examine Rodawald in the county jail at Little Valley, N. Y., on condition that if I found the prisoner insane that he would not prosecute him

for the crime of murder, or if he did try him, I was to be free to appear for the defense. His reply was that "all he was after was justice." "That he did not seek to convict a man of a crime when he was not responsible for his act, and that his only wish was to be advised about the proper course to pursue."

Soon after I visited the prisoner in the county jail, and spent the entire day with him. My official report to District Attorney Cole will cover the salient details of the crime, and give my opinion of the prisoner's mental state.

EXAMINATION OF WILLIAM RODAWALD AT THE REQUEST OF GEORGE W. COLE, DISTRICT ATTORNEY OF CATTARAUGUS COUNTY.

William Rodawald. Age 49. Occupation, tannery laborer. Born in Germany. In this country about 14 years. Married. Now living with his third wife.

In jail at Little Valley awaiting the action of the Grand Jury for shooting Jesse F. Bayer at Salamanca, N. Y., April 7th, 1903.

I first saw Rodawald in the jail corridor, having been admitted with two of his friends, and there had an opportunity to observe him while visiting with them. He was quiet, collected, in no sense excited, nor was he depressed.

Later I saw him in the presence of the turnkey in the sheriff's office; was simply introduced to him as a physician. He did not ask who I was, nor express any interest why I was there; talked freely and was quiet and easy in his manner. Gave me information concerning his birth, occupation in Germany, when he came to this country, where he had worked and common facts concerning his family, and how long he had been in jail. Many of these facts I have since confirmed by inquiry from other sources.

PHYSICAL EXAMINATION.

His general appearance good; muscles hard; hands show that he is accustomed to hard labor; tongue clear and steady; eyes bright and react to light and accommodation. When asked to stand, close his eyes and turn around or

walk from one side of the room to the other, was a little uncertain but did not stumble. Knee reflexes slightly exaggerated; no particular zones of skin anaesthesia.

Says that his appetite is good, though when first admitted to the jail he felt discouraged, realized his position and for a few days he did not eat as much as usual. Now sleeps well.

His physical health from his point of view was good; very seldom has he ever been sick. He gives a history of having been injured about fifteen years ago; not very certain about the date, but while he was living in Germany. He was struck on the head with a spade and this blow left a scar over an inch and a half long in the left temporal-parietal region. He claims that he was unconscious for several hours after this injury and that he was confined to his bed for six weeks. He understands that his skull was fractured at the time he was struck, but from an external examination no line of fracture can be determined now. He is tender from pressure in the region of the injury. Since the injury to his head, has occasionally had severe headaches. The most severe attack of headache he ever had was about one year ago, when he states that for two weeks he was too ill to work. During attacks of headache he suffers most in the region of the head injury. (His wife says she has no remembrance of his having been sick and unable to work for two weeks in the twelve years they have been married.)

I spent over an hour with him alone. He described in detail the shooting of Bayer, in substance as follows:

He had finished his work in the tannery, drew his pay and on his way home stepped into a saloon and drank two glasses of beer. His wife and boy, thirteen years old, met him before he arrived at his home and they picked up some railroad fence posts lying beside the railroad and started to take them to the house. A neighbor woman called to him to let them alone, that the posts were her property. He claims that the section boss gave the posts to him and he continued on towards the house with the posts; that a man (Bayer) he cannot recall his name, but

he refers to him as the "sailor man," came out about the time the woman spoke to him and told him to let the posts alone, made threats and when he refused to drop the posts, drew a knife; that the woman returned to her house and soon came out with a butcher knife, and that about that time a negro who lived near by also became mixed up in the quarrel. He dropped the posts, ran into the house, picked up a revolver that belonged to his son and came out to protect his wife and son. He claims he believed the "sailor man" and "the woman with the butcher knife" were likely to do them harm. He says he did not present the revolver to Bayer as if to shoot, but in the rush towards him he stumbled and Bayer placed his hand upon his shoulder, or his coat collar, and the revolver went off accidentally and shot the "sailor man;" that he had no intention of shooting him; that now he regrets it very much and appreciates the fact that he must face a grave charge in court.

In regard to his ideas, he does not claim to know of any enemies that he has and says that he never had any trouble with the man whom he shot, in fact barely knew that there was such a man living in Salamanca. He admits having seen him before. He had at one time some trouble with the woman. He said that he went to the police justice to swear out a warrant for her, but he failed to get the warrant. He claims that he is a man of peaceful disposition, does not fight and is on amiable terms with his associates. He does not believe that he is being persecuted.

He takes up general subjects and discusses them freely and frankly; spoke of being a subscriber to a German newspaper; said that he did not read English but that he liked to read his German paper; spoke freely of his work at the tannery and of the different kinds of labor that he had been doing since he lived in Salamanca; spoke of his family; referred to his three marriages; told about getting into trouble in Germany and as a result was sent to jail for nine months; explained the trouble as having been a general fight among laborers, and said there were about fifteen men all sent up for the same length of time.

He is entirely free from everything in the line of a delusion; he is able to reason correctly from his point of view; has no hallucinations. His general perceptive faculties for one of his education and environment are good.

I again saw him in the presence of his wife and son, and she corroborated a number of the statements that he made to me at the time of the first examination.

Again I saw him alone, and I went over with him in detail the time of the homicide, and he did not change or vary his statements in any material way.

I also saw a man who called on him in the jail—a man who had known him for several years and at times had worked with him—and asked him how Rodawald impressed him at the present time. His statement was unqualified in saying that he could not see any difference in him now from any time. This man also saw Rodawald a very short time, half an hour, before the shooting. He met him going from his work to his home that night and stopped and talked with him, and at that time he appeared to be as he had always known him.

CONCLUSION.

From my examination of William Rodawald, I am unqualifiedly of the opinion that he is in his normal mental condition, that he is able to realize his position, and that he does appreciate that he has committed a crime in shooting Jesse F. Bayer, and was in every respect responsible for his act at the time of the shooting.

Dated, Gowanda, N. Y., April 24th, 1903.

(Signed) G. F. ADAMS.

The evidence at the trial as given by five eye witnesses was positive that Bayer did not have a knife in his possession at the time of the shooting; nor did the woman who claimed the posts have a butcher knife or any other knife or weapon. The witnesses for the prosecution also swore positively that Rodawald went into his house saying that he was going for a gun to shoot the "sailor man," and when he came out of the house with the revolver in his hand, he rushed up to Bayer and fired point blank at him,

and after Bayer fell shot through the head, Rodawald stood over him swearing, flourishing his revolver and threatening to shoot again, if the shot he had already fired had not done its deadly work. Soon after the shooting Rodawald said to those present, that he would give himself up, and he did so as soon as he could find an officer; remarking that he had shot a man and wanted to be locked up.

The trial did not develop any special incident of note. The defense did not try to prove the prisoner was insane except by inference.

Rodawald was sworn in his own defense and made a good appearance on the stand, relating the same story to the court and jury that he did to me at the time I examined him in jail only more in detail, under the careful questioning of the attorneys. The jury took but a short time to decide that the prisoner was guilty of murder in the first degree.

As the judge pronounced sentence of death by electrocution upon him, he collapsed but soon recovered and from that time was a model prisoner all the time of his residence in the death house in Auburn prison.

THE PSYCHOLOGICAL QUESTION.

Let us go back in the history of William Rodawald three or four years. He was employed by the same tannery piling bark. His attention was attracted to three young men running across an open field near the bark pile he was on. A man was pursuing them and calling them to stop. He ceased his work and watched carefully the actions of the pursued and the pursuer. He saw three young fellows, about eighteen or twenty years old, evidently trying to get away from an older man who was shouting to them to surrender, and when they did not stop, the older man raised a revolver and fired at the three boys. One of them fell fatally wounded.

Rodawald saw all this for he was only a short distance away. He had never seen a man shot to death before, and the tragedy made a profound impression on him. He was the only person who saw the whole of the shooting.

The facts pertaining to the shooting are in substance as follows: The Erie R. R. that runs through Salamanca, N. Y., had been losing freight from its cars. Thieving was so very bold and common that the Railroad Company sent a special detective, by the name of Wheeler, to protect its property. One day Wheeler was patrolling the R. R. yard when he saw three boys by some loaded freight cars, and thinking he had probably discovered a gang of thieves, started in pursuit. The boys ran out of the yard across the field with Wheeler close after them, calling to them to surrender. As a matter of fact they were not thieves, and at the worst, in the eye of the law, could only be considered as simple trespassers. When the shot was fired the young men were not on the railroad property. Soon after Wheeler was arrested and tried for the killing of the young man. Rodawald was the star witness in the trial. The jury disagreed, which necessitated a second trial of the case, and the jury brought in a verdict of assault; so the judge imposed as the only punishment a fine of \$600. This fine was paid, and Wheeler was a free man. When Rodawald heard the result of this conviction of assault, and that only a fine of \$600 had been imposed, he threw up his hands in disgust, and exclaimed: "Hell of a country—shoot a man—fine him \$600—hell of a country." What do *you* think of Rodawald's conclusion?

William Rodawald was born and reared in Germany, where the law of the land is enforced. He had met the stern hand of the German law, had been arrested, convicted and served a term in prison for no greater crime than a free fight among a gang of laborers. He had a most profound and wholesome respect for law and order. More than all this, he had tried to do his duty, as he saw it, by appearing in court as a witness in a murder case, and yet in spite of the fact that a murder had been committed, and he knew of this murder more fully than any other person, the only punishment inflicted was a small fine. Do you wonder that he said "Hell of a country?"

If you had been brought up as Rodawald was to respect and fear the law, had witnessed a murder as he did, been the

star witness in two trials of the murderer, and the whole attempt of the majesty of the law to punish the criminal had resulted practically in his acquittal, do you not believe—do you not know a great and lasting impression would have been made on you?

Would William Rodawald have shot Jesse F. Bayer if he had not been impressed that this was a "Hell of a country?"

THE PENNOYER,
Kenosha, Wis.

PSYCHOLOGICAL STUDIES OF MAN'S MORAL EVOLUTION.*

THE CREEPING SERPENT IN OUR GARDEN OF EDEN.

By ALBERT S. ASHMEAD, M. D.,

NEW YORK.

GROPING in the dark, like a blind man, I cannot see plainly. Yet the light of Christian day is perhaps the most favorable that "Kind Nature" is able to present.

I use "blue" ink in analyzing this subject, for the reason that I can see it reasonably well. The blacker ink of utter despair would require straining effort. I cannot much longer escape "the knife," unless I decide to do without it. My light then would be entirely out.

The Dogmatist will say "*Nemesis*." Let him remember Milburn, the blind preacher, and Dr. Love and his fatality.

The term "Law of Evil" is good, but not all embracing as is the term "Law of Demolition."

All sickness is the dastardly work of the organic Law against Man and Mankind. It is the principle of destruction at work. Matter, Mind and Morals ever under attack, and man quarrelling with man labors in vain for self-preservation, for harmonious life until the admitted necessary total darkness of death. The blind lead the blind toward altruism, and find it not.

The Law of Demolition admits no division of responsibility. The Great Cause is the cause of all features of life, and Man, individually and collectively, is only an exhibit of the work of *Nature*, *The Great Criminal*, that "can smile and smile, and be a villain still."

I know no difference of meaning between the term *God* and the term *Nature*.

*Continued from February, 1907.

Rasselas states it well:—"The angels of affliction spread their toils alike for the virtuous and the wicked; the mighty and the mean."

But we see that the virtuous are continually assailed and perverted, becoming themselves, agents of and for the destroying quality. So where is the sensible reason for assuming that a kind God exists when we see that *Evil is a feature of the Organic Law?*

One half of it.

No—it is *All One*.

I believe that as to the essential views I have expressed from time to time there can be no dissent upon any one's part. We go our respective ways at the signboard "Faith": One way leads to the ever receding sun mocking the birth of a new day of life. Mine leads to the darkness into which I deliberately go, wholly heartbroken, with the delusions and illusions, and treacheries of that God, that was preached to me as a Harbor and a Guardian. I will be no longer a credulous listener. If one finds comfort in Faith, it is one's duty to support it and be by it supported. As my days near their close, I become more bitter. "There is no God" said the Psalmist.

Let us see what "words, idle words" or language, can tell us of our subject.

In the "dark backward and abyss of time," animals and man had the power of speech. For Talmudic tradition tells us this, also Biblical history.

In the account of Man's creation and his fall in the book of Genesis, we read that the Serpent, more subtle than any beast of the field, said unto the woman: 'Yea, hath God said; Ye shall not eat of every tree of the Garden,' and the woman said unto the Serpent; 'we may eat of the fruit of the trees of the Garden. But the fruit of the tree which is in the midst of the Garden, God hath said, Ye shall not eat of it. Neither shall ye touch it, lest ye die. And the Serpent said unto the woman, Ye shall not surely die. For God doth know that on the day ye eat thereof then your eyes shall be as God's, knowing good and evil, etc,' and they ate of the fruit and the eyes of them were opened.

And the curse of the Lord was to the woman; in sorrow thou shalt bring forth children. And to the man, in sorrow shalt thou eat of it all the days of thy life. Thorns also and thistles shall it bring forth to thee. And thou shalt eat the herb of the field. In the sweat of thy face shalt thou eat bread, till thou return unto the ground; for out of it wast thou taken: from dust thou art, and unto dust shalt thou return.

Herein we discover no surprise at the power of speech residing in the serpent. God even addresses a special curse to him; and his subtlety over the other beasts is alluded to: "Thou art cursed above every beast of the field; upon thy belly shalt thou go."

What was the curse of those other beasts of the field? Was it denial to them, or abolition of speech? In the world's history, down to the dispersion of the human race at the building of the Tower of Babel, language is supposed by some philologists and antiquarians to have been *Mayan*. And this language, if any at all, if it was really the oldest, was that spoken by those beasts of the field, or only the serpent, in the "Garden of Eden?" And as the serpent understood what was said to him there, this must have been the language of God in the Garden, that is if language then, was really sound of tongue and not mere signs, or inarticulate sounds. After the dispersion, men's tongues became confused; mankind multiplied, and through numerous individualizations, types of particular men or communities, became narrowed, the more peculiarization of types, the narrower became each of them. These allusions to speech in beasts are handed down to us through the Hebraic tongue, a race which has maintained its purity of type free, from the time of the Christ we know in our Christian era. The Christ was a Jew. While the God of the Hebrew, his Father, spake to the serpent in the oldest language, the Mayan tongue, Christ, his Son, spoke to the Jews, in Hebrew. These two languages then, so widely separated by time, are the only ones inspired of God in this Christian-Jewish-Greek religious world of other days.

Dr. Brinton, in his ethnological and philological studies

in Yucatan and Central American civilization, and whose manuscript dictionaries of the Maya language are the finest in the anthropological world, has deciphered among the Mayan tribe, a Mayan origin for the last words of Christ on the cross "Eli, Eli, Lama, Sabach thani," which, interpreted not in Hebrew as most theologians do, as "My God, My God, why hast thou forsaken me?" but in Mayan, as "it is dark, it is dark, this must be death;" or "there is no light" is a much purer interpretation of the last words of the Son of God, (which naturally would be in his Father's tongue) than is a lament that his Father had deserted him in his supremest hour.

All knowledge came to us from the tree of knowledge of good and evil. Some of our knowledge we call good according to the light or power of interpretation that is in us, at a certain period of world existence; some we call evil, according to our lesser capacity, or necessity of judgment, of education, of environment, or lack of power to be "good," in one country or another, or race, or under one or another religious bringing up, circumstances of life, over which we have no more control than we do over the question of birth.

Now Mayan, in Hindostan, means the personified active will of the Creator. This allusion is personified as a Celestial Maiden (woman) taking the place of the older Avidya or *Nescience*.

Avidya is Sanscrit and means ignorance, which is "*Maya*" the condition in which every one must be at birth, and remain until he "eat" of the fruit of the tree of knowledge of Good and Evil.

According to the dictionary, philosophical nescience regards the mind or soul as cognizable only as successive states of consciousness and with no ultimate ideas of its own. Cosmological nescience denies or ignores the existence of soul, matter, and God,—one or all. Ontological nescience denies that anything can be known in itself. There may even be distinct degrees of nescience, as (1) that nothing is knowable beyond cogitation; (2) that nothing is knowable beyond the cogitative Ego; (3) that if anything is knowable beyond that, it cannot be known with

certainty. In all forms, nescience may be positive or negative.

In *David Grieve* Mrs. Humphrey Ward says: The new English phase Kantian and Hegelian thought is the outlet of men who can neither hand themselves over to authority like Newman, nor to a scientific materialist like Clifford and Haeckel, nor to a more patient *nescience* in the sphere of metaphysics like Herbert Spencer. Bacon says: "We do not meditate or propose a catalepsy, but en-catalepsy, for we do not derogate from sense, but help it, and we do not despise the understanding but direct it."

Acatalepsy is the incomprehensibleness of things; the doctrine of the ancient skeptics, that things are such that no certain knowledge of them is possible.

Agnosticism was the creed of a sect of the 3d century, who held that God does not know all things. In general, the doctrine was of *nescience*, or that theory of knowledge which maintains that man cannot have, or at least has not any real or absolute knowledge of anything, but can know only "impressions." Contemplated in its philosophical side agnosticism is a professed exposition of the limits of human knowledge and thought, maintaining the impossibility of knowledge of the Infinite, in opposition to the theory of a restricted but true knowledge of the First Cause, as infinite and absolute. (Relig. Encyclop.)

Epistemology is the theory of the grounds of knowledge.

Experimentalism is the theory that all knowledge is based on and must be tested by sense and experience as distinguished from intuition: opposed to intuitionism.

Gnosiology is the branch of philosophy that treats of the principles of cognition; the theory of knowledge or of the philosophic principles underlying knowledge, or the activities of the cognitive faculties. Gnosis means the higher knowledge of mysteries. Gnosticism was an eclectic system of religion, and philosophy existing from the 1st to the 6th century. It occupied a middle ground between paganism and Christianity; teaching that knowledge rather than faith or philosophy was the key to salvation; and in-

corporating some of the features of Platonism, Orientalism and Dualism with Christianity. The Gnostics held that all existences, material and spiritual, are derived from the Deity, by successive emanations or *eons*. Christ was merely a superior *eon*. *Eon* is the personification of a divine attribute, especially one of the higher class of emanations from the deity whose substantial powers, embraced in the divine essence, constituted the divine plenitude or *pleroma*. The *pleroma* consisted of God, (silence or conception,) from which emanated pairs in a downward scale, mind, truth, word and life, man, church. With eleven other pairs, these constitute the divine *pleroma* or fulness. These beings are called *Eons*. (Relig. Encyclop.)

Intuition is quick perception of truth without conscious attention or reasoning, or the possession of such perception; knowledge from within, instinctive knowledge or feeling. Genius works less by a process of conscious reasoning, than by a flash of intuition, and less by abstract conception, than by a prophetic beholding of results. (Poetry and Duty, Imagination.)

In psychology, intuition is the power of gaining immediate knowledge whether by sense-perception, by consciousness, or by rational apprehension; especially the power of gaining such knowledge of necessary truths. In philosophy intuition is any immediate knowledge, especially the knowledge of the first or necessary truths or principles underlying all other and mediate knowledge.

Intuitionism is that general system of philosophy in which the immediate perception of truth, and especially of necessary truth, is recognized as an original endowment of the intellect and as the foundation of all knowledge.

Dr. McCosh, of Princeton, suggested the term *Mero-gnostic* for one who claims to know in part as distinguished from gnostic and agnostic. Joseph Cook says it is not true that we know everything. Nor is it true that we know nothing. It is true that we know in part. Between gnosticism and agnosticism stands the sound philosophy of *mero-gnosticism*. A cautious and well-informed man will be neither gnostic nor agnostic, but a *mero-gnostic*.

Metagnosticism is the doctrine that there is a positive knowledge of the absolute attained, not by the *logical reason*, but by a higher *religious* consciousness, introduced in opposition to the negation of agnosticism. Metagnostics, imply a metaphysics, a going beyond ordinary knowledge.

Skepticism is the doubt, or entertainment of a doubt concerning something. It is the state of being a skeptic or the doctrines of skeptics. An attitude of doubt towards the doctrines of historical religions is called skepticism. It implies doubt concerning all propositions whatever.

Pyrrhonism was a system of gnosiology inculcating skepticism, taught by Pyrrho about 360—270 B. C. He was the founder of the first and inspirer of the second skeptical schools of Greek philosophy—hence absolute skepticism. Pyrrhonism affirms that both the senses and consciousness as sources of knowledge are absolutely untrustworthy, and that just as much can be said against the truth of any opinion whatever as in favor of it, and it advocated holding the judgment in permanent suspense on all subjects.

Mysticism implies obscurity, mysteriousness. In gnosiology it is the doctrine that truth is attainable without the aid of the senses and the processes of thought or reason.

Mysticism, according to Morell, (*Speculative Philosophy*) is that which refusing to admit that we can gain truth with absolute certainty either from sense or reason, points us to faith feeling, or inspiration, as the only valid source.

Mysticism is the doctrine and belief that man may attain to an immediate direct consciousness or knowledge of God, as the real and absolute principle of all truth and of all essential divine truth in him. The term is applied to a system of thought and life of which the chief feature is an extreme development of meditative and intuitive methods, as distinguished from the definitive and scholastic. It takes different forms as it maintains that truth is gained (1) by a mode of faith or of intuition as held by Coleridge, Thos. Taylor, Bronson Alcott and others; (2) by a fixed supernatural channel, as the Bible, the church, or the sacraments; (3) by extraordinary supernatural means, as by the

immediate action of God upon the mind, as maintained by Friends, Quietists, etc.

Philosophers and Monks alike employ the word mysticism and its cognate terms as involving the idea, not merely of initiation into something hidden, but, beyond this, of an internal manifestation of the Divine to the intuition or in the feeling of the secluded soul (Hours with the Mystics).

Quietism is the doctrine that spiritual exaltation is attained by self-abnegation, and withdrawing of the soul from outward activities; fixing it on passive religious contemplation; mystic meditation or introspection, as cultivated by the Molinists, or by Buddhists.

Miguel de Molinos, a Spanish priest of the 17th century, was the expounder of this system. As the Hindus steadily pressed down the valley of the Ganges, into warmer regions, their love of repose and contemplative quietism, would continually deepen (The Two Faiths). Hence its origin or continuance in Brahminism and Buddhism. The modern school of *Nescientists* maintain that it is not competent for the finite intelligence to ascribe motives to the unknowable (Science and Religion).

Experience is knowledge derived from proof furnished by one's own faculties or senses; experimental knowledge, especially the state of such knowledge in an individual as an index of wisdom or skill.

In the associationist or experimentalist philosophy, it is the immediate perception of simple or historical fact, especially perception of the senses, excluding perception of the necessary relations of fact and intuitive truths, the existence of this mode of perception being denied. The process (and the power) of inductive observation and conclusion, especially as resulting practical wisdom.

Faith is a firm conviction of the truth of what is declared by another by way either of testimony or authority without other evidence; belief in what another states, affirms or testifies, simply on the ground of his truth or veracity (especially as distinguished from mere belief), practical dependence on a person, statement or thing as trustworthy—

fiducial as opposed to merely intellectual belief—trust.

In theology specifically (1) the assent of the mind or understanding to the truth of what God has revealed; belief in the testimony of God as contained in the Scriptures; (2) a divinely wrought, loving and hearty reliance upon God, and his promise of salvation through Christ or upon the Christian religion, as revealing the grace of God, in Christ; sometimes called justifying or saving faith, as we are saved through faith. The first conscious exercise of the renewed soul is faith. (Systematic Theology.)

More widely it is operative belief in the truths of religion; practical realization of the power and excellence of Christian doctrine; as a serene and blessed faith. Intellectual conviction in general on whatever based, including even an approach to absolute knowledge; faith in Herodotus; faith in the nebular hypothesis; faith in mathematical demonstration or axiom; a doctrine or system of doctrine, or a proposition or set of propositions, that one holds to be true; specifically a religious creed or article of belief, as the Lutheran faith, a man's political faith.

Thackeray says in *Henry Esmond*: "'Tis not the dying for a faith, that's so hard, Master Harry, 'tis the living up to it, that is difficult."

In religion it is common to distinguish between intellectual belief of religious truth, as any other truth might be believed, and belief of the heart, or saving faith.

The Latin word "*fido*" from which faith comes, means trust.

Le Plongeon says of Yucatan: "One-third of the Mayan tongue is pure Greek. Who brought the dialect of Homer to America? Or who took to Greece that of the Mayas? Greek is the offspring of the Sanscrit. Is Maya? Or are they co-eval? The Maya is not devoid of words from the Assyrian." According to Dr. Max Muller, if we confine ourselves to the Asiatic continent, with its important peninsula of Europe, we find in that vast desert of drifting human speech three, and only three oases, have been formed in which, before the beginning of all history, language became permanent and traditional—assumed in fact a new

character, a character totally different from the original character of the floating and constantly varying speech of human beings. These three oases of language are known by the name of Turanian, Aryan and Semitic. In these three centres, more particularly in the Aryan and Semitic, language ceased to be natural; its growth was arrested, and it became permanent, solid, petrified, or if you like, historical speech. I have always maintained that this centralization and traditional conservation of language could only have been the result of religious and political influences; and I now mean to show that we really have clear evidence of three independent settlements of religion, the Turanian, and Aryan and the Semitic—concomitantly with the three great settlements of language. There can be no doubt that the Aryan and another branch, which Muller called Semitic, but which may more properly be called Hamite, radiated from Noah; it is a question yet to be decided whether the Turanian or Mongolian is also a branch of the Noachic or Mayan stock.

Max Muller says further: If it can only be proved that the religions of the Aryan nations are united by the same bonds of real relationship which have enabled us to treat their languages as so many varieties of the same type, and so also of the Semitic, the field thus opened is vast enough and its careful clearing and cultivation will occupy several generations of scholars. Names of the principal deities, words, also expressions of the most essential elements of religion, such as prayer, sacrifice, altar, Spirit, law and faith, have been preserved among the Aryan and among the Semitic nations; and these relics admit of one explanation only. After that a comparative study of the Turanian religions may be approached with better hope of success; for that there was not only a primitive Aryan and a primitive Semitic religion, but likewise a primitive Turanian religion, before each of these primeval races was broken up, and became separated in language, worship and national sentiment, admits, I believe, of little doubt. There was a period during which the ancestors of the Semitic family had not yet been divided whether in language or religion. That

period transcends the recollection of every one of the Semitic races, in the same way as neither Hindoos, Greeks nor Romans have any recollection of the time when they spoke a common language and worshipped their Father in heaven by a name that was as yet neither Sanscrit nor Greek, nor Latin. But I do not hesitate to call this prehistoric period historical in the best sense of the word. It was a real period, because, unless it was real, all the realities of the Semitic languages and the Semitic religions, such as we find them after their separation, would be unintelligible. Hebrew, Syriac, and Arabic point to a common source as much as Sanscrit, Greek and Latin; and unless we can bring ourselves to doubt that the Hindoos, the Greeks the Romans, and the Teutons derived the worship of their principal deity from their common Aryan sanctuary, we shall not be able to deny that there was likewise a primitive religion of the whole Semitic race, and that *El*, the strong one in heaven, was invoked by the ancestors of all the Semitic races before there were Babylonians in Babylon, Phœnicians in Sidon and Tyre—before there were Jews in Mesopotamia or Jerusalem. The evidence of the Semitic is the same as that of the Aryan language; the conclusion cannot be different.

These three classes of religion are not to be mistaken—as little as the three classes of language, the Turanian, the Semitic and the Aryan. They make three events in the most ancient history of the world; events which have determined the whole fate of the human race, and of which we ourselves still feel the consequences in our language, in our thought, and in our religion.

“The original seat of the Phœnician Hebrew family is supposed by some to have been in the Central American situation. The Great God of the so-called Semites was *El*, the Strong One, from whose name comes the biblical *Beth-el* (“house of God”), *Ha-el* (“the Strong One”), *El-ohim* (“the God”), *El-oah* (“God”); and the Arabian names of God, *Allah* and *Ba-bel*. The Tower of Babel was the Tower of God.

The original “language” of the earth was Mayan (ig-

norance), from which grew all human expressions of intelligence, either by growth of language, by words of speech, or pictorial signs, and with these expansions, have come to us, all our conceptions, intellectual or moral, of whatever has been, is, or will be. Muller says that Ignorance (Maya-Avidya) is really the primary cause of all that seems to exist.

Death, then, is the blotting out of all the individual's knowledge. From Nescience we came, and to Nescience we shall return. With knowledge, we acquired conception of the fact, of death.

(To be continued.)

CASE OF CANINE HERMAPHRODISM.

BY R. W. SHUFELDT, M. D.,

Major Med. Dept. U. S. Army, (Ret.) Member Medico Legal Soc.
N. Y. City. Cor. Member Zool. Soc. London, etc., etc., etc.

EARLY in the month of September, 1906, my attention was invited by Dr. Sam'l E. Weber, of Lancaster, Pa., to the case of a Boston terrier, then in the wards of the New York Veterinary Hospital (117 West 25th Street), that presented certain anomalies of the genital organs. The animal was owned by a lady in New York City, and it was entered as an "out patient case" to be cured, if possible, of a persistent and annoying habit. It was claimed that the dog was apparently possessed of a



(Fig. 1. Hermaphrodite Dog.)

very amorous disposition, and when at liberty and brought in association with others of its kind, it immediately availed itself of the opportunity to gratify its inordinate sexual desires upon them, and this quite irrespective of the sex of the comers.

On the 7th of the above mentioned month, in company with Doctor Weber, I visited the Veterinary Hospital to examine the case. I took with me an 8x10 camera and

the necessary materials to make photographs if required. At the institution in question, Doctor Armstrong was the surgeon in charge, and through his courtesy every possible facility was extended to me to make as full a record of the case as one could desire. It was soon ascertained that the animal under observation was of the breed known as the Boston terrier, and one not quite two years old. (See Figure 1). There was nothing peculiar about it upon superficial examination; confiding in its behavior and gentle in disposition, it resembled most other dogs of its kind that I had seen. Moreover, the color of its coat resembled what we see in most of the breed, being of a general smoky brown, with white paws, a white medium frontal stripe and collar, with white encircling the entire muzzle including the anterior part of the lower jaw. Its tail and ears had been cropped, and it was in excellent general health.

Proceeding to the examination, in which Doctors Weber and Armstrong took part, it was demonstrated that the genital fissure in this animal was unusually small for a subject of its age and size. On the other hand the vaginal labia were prominent, puffy, and somewhat enlarged. They were likewise to a degree congested and exhibited evidences of undue excitation. What was more remarkable than anything else however, was the anatomy of the clitoris. Here we were presented with a structure, which for size and peculiarities, exceeded anything of the kind I had ever witnessed in a canine. It was not only voluminous in proportions, but upon the slightest provocation it became erect, at which time it measured fully two centimetres or more in length and harbored in its central medium longitudinal structure a firm, dense morphological element that was either composed of true bone or else was composed of a corresponding cartilaginous constituent homologous with the

os penis as found among the *Canidæ* generally. Through the kindness of Doctor Weber and an assistant, I was enabled to photograph this structure, and a print from the resulting negative is herewith reproduced in Figure 2.

This large clitoris was semi-erect when photographed,



(Fig. 2. External genitals in a Hermaphrodite Dog.)

and we all being on the roof of the hospital at the time, there was a strong overhead light, and this accounts for the deep shadow beneath and in continuation with the structure.

As the vagina was of small calibre it was impossible to make any satisfactory examination of the internal organs of generation, but it is fair to presume that it is quite possible they do not depart much from the structures as they are found normally. It is fair to imagine that they were to some extent aborted. The mammary glands were much reduced, and the animal had never littered.

As this terrier was under my observation less than an hour I had no proper opportunity to study the psychological side of its nature, something I should very much liked to have done. I deem it more than probable that its sexual instincts and the methods resorted to, to gratify them would, everything else being equal, be quite similar to those of a human hemaphrodite with a like abnormality of the parts involved.

IS SEXUAL PERVERSION INSANITY?*

By HAROLD N. MOYER, M. D.,

CHICAGO.

THE problems raised in the title of this paper depend for solution on the conception of the two psychic phenomena mentioned. As all conditions in science being products of development are relative, no absolute standard can be employed. Insanity cannot be a product of education, of mental environment or even of strong outside suggestion. It must be a condition dependent on factors inherent in the individual, not the result of adequate external causes, and furthermore, must prevent the individual from recognizing its morbid nature. The imperative conception of neurasthenia and allied states, whose morbid nature is recognized by its victim and whose expression is checked by him, is not considered for these reasons insanity. The first postulate of a scientific conception of insanity, is therefore, a morbid mental condition, based on brain disease, disorder or defect. These three elements represent the pathology of all types of insanity, since the pathophysiologic basis is either teratologic, as in all the congenital types, or circulatory and destitute of demonstrable pathologic results or, finally, characterized by these last. Another element necessary to the conception of insanity is that no adequate external cause of mental type shall be present. Many strange customs and beliefs, which in a civilized 20th century human being suggest insanity, even at present are but too often survivals of the folklore of primitive man. Less than a quarter of a century ago a German and his wife were sentenced to the penitentiary

* Transactions, Chicago Academy of Medicine, Nov. 1906.

for assaulting a young girl to cure themselves of gonorrhea, in accordance with the folklore belief that disease can be cured by giving it to another. A little over a decade ago, many prominent North Side Germans of Chicago were gulled by a "doctor," who professed to cure disease by putting money into a magic tree. Some of his dupes, with the mixture of suspicion and stupidity so characteristic of the superstitious, marked the money given him, and found that in lieu of worshiping Dryads, he had been worshiping Gambrinus. In consequence, he was sent to the penitentiary for obtaining money under false pretenses. An element necessary to the conception of sanity is that the balance of the will, however disturbed, shall not be destroyed and that the individual shall be able to control as well as recognize the expression and results of his morbid condition.

Sexual perversion is an alteration of the normal sexual appetite, either as to the object of the appetite, or as to the method of its expression. This may occur in accordance with the ordinary physiologic law that a nerve too frequently excited by one irritant, ceases to respond to that irritant and requires a new excitant. In sexual perversion therefore occur conditions where the state is fully recognized and new excitants are consciously and willingly employed to rouse a fading passion. Sexual perversions may therefore be divided, as they affect the expression or the object into sexual perversion, which dominates the expression; inversions which dominate the object and perversities, where the method of excitation is voluntarily used to rouse a sated appetite. The perversions include what Havelock Ellis† has called erotic symbolism, usually designated fetichisms. This may affect methods of conjugation. The primitive appetite was hunger and sexuality first expressed itself in the cannibalistic conjugation of the ameba. This creates a condition, where pain inflicted or suffered as an expression of affection, is an essential part of conjugation. In accordance with the ordinary law of psychic evolution, the symbol takes the place of the thing

†*Medicine*, 1906. *Alienist and Neurologist*, 1906.

symbolized. Here, as in the allied domain of religious emotion, the symbol often becomes all important to enjoyment. In this state the individual may fully recognize the significance of his acts, may be fully able to restrain them, but still prefers the enjoyment given by them. The two conditions coming under this category are variously designated as active and passive algophily, active and passive algolagnia, sadism and masochism. These erotic symbolisms may take a normal (hetero-sexual) direction or an inverted (homo-sexual) direction. The inverted type may be an expression of arrested development at the indifferent period of intra-uterine life, whereby the nervous system takes one ply while the sexual organs take another; still the individual recognizes the same general moral code and can comply with it as easily as the ordinary well-developed human being. He recognizes that, however different from others, his sexual expressions are still sexual expressions, and must for moral considerations have the same limitation as those of normal appetite. In addition to the classifications just given, others worthy of mention occur in the literature. J. G. Kiernan* classified perversions as: Those which originate in imperative conceptions. Those due to congenital defect. Those which are incident to insanity, periods of involution, or to neurotic states. Those which result from vice. These last arise from the fact that nerves too frequently irritated by a given stimulus require a new stimulus to rouse them. Those who have a neuropathic diathesis and whose sexual functions are not normally performed.

G. Frank Lydston† classifies them thus:

Congenital and perhaps hereditary sexual perversion.

Acquired sexual perversion.

a. Sexual perversion without structural defect of the sexual organs.

b. Sexual perversion with defect of genital structure, *e. g.*, hermaphroditism.

c. Sexual perversion with obvious cerebral defect, like idiocy.

**Detroit Lancet*, 1884.

†*Essays*: 1889.

a. Sexual perversion from pregnancy, the menopause, ovarian disease, hysteria, etc.

b. Sexual perversion from acquired cerebral disease, with or without recognized insanity.

c. Sexual perversion (?) from vice.

d. Sexual perversion from over-stimulation of the nerves of sexual sensibility and the receptive sexual centres incidental to sexual excesses and masturbation.

Krafft-Ebing* divides the abnormal manifestations of the sexual appetite into:

	Peripheral Neuroses		
	Spinal Neuroses		
	Cerebral Neuroses.		
Sensory	{ Anesthesiæ Hyperesthesiæ Neuralgiæ Nymphomania Satyriasis.	Aberrant but normal appetite.	{ Sadism Masochism Fetichism Necrophilism
Motor	{ Spasms Pollutions Paralysis Spermatorrhea.	Diminution or abolition of normal appetite.	{ Congenital sexual perversion. Acquired sexual perversion.
Secretory	{ Aspermia Polyspermia.		
Erection	Disorders		
Ejaculation	Disorders		
Paradoxal	Neuroses		
Anæsthetic	Neuroses		
Hyperæsthetic	Neuroses.		
Sexual perversion proper	{ Psychological hermaphroditism or heterosexuals. Pure homosexuals. Effemination or viraginity. Gynandry and androgyny.		

According to Sommers, the endogenous nature of a certain mental state is not sufficient to establish the existence of mental disease. This is especially the case in the domain of psycho-sexual anomalies. When it is proven that a person, from endogenous disposition, is perverse, *e. g.*, when a man is excited (sexually) by another, he should be punished for a corresponding act, when the act falls within those that are punishable. "Human society has the same right to demand control of the en-

*Psychopathia Sexualis.

ogenous impulse in general that it has to demand it in cases of congenital allo-sexual instinct when it is directed against a child of the opposite sex; or that the impulses to possess the property of others be repressed. Therefore, if these perverts are to be made free from punishment, this is not to be done during the existence of the present laws by declaring them insane, but by changing the laws. The decision of this question is not to be made by psychiatry, but by public opinion, in so far as it may be the expression of the actual moral ideas of the majority of the people. As long as the moral ideas of the majority of the people are opposed to homosexual acts and the laws give expression to these ideas, the so-called contrary sexual persons must control their impulses, as the man who, hungry, must control his impulse to possess himself of the property of others. At most, it might be said that the gratification of homosexual inclinations was a private matter between two persons, which did not harm society as long as scandal is not excited by it. There seems to be no doubt, however, that among those persons that indulge in homosexual acts, there are many insane individuals. The mere existence of endogenous anti-social impulses (among which those in question are to be reckoned), like endogenous instincts, should not be punished, but they should not be taken as evidence of insanity."

Schrenck-Notzing* remarks that there are three possible etiologic developmental factors in the production of contrary sexual instinct: (1) original cerebral constitution; (2) a neuropathic disposition with educational influence; (3) pure cultivation in normal individuals. Class 2 is by far the most numerous.

"The fact of disease of the sexual instinct does not in itself render the individual affected irresponsible. Only the proof that the individual has committed a criminal act as a result of organic necessity, as if forced to it, and owing to his cerebral constitution, was incapable of developing (or acquiring) the necessary inhibitory (or restraining) ideas, will allow him to be held as devoid of free will.

**Psychopathia Sexualis.*

Very many individuals of contrary sexuality are well able to control their impulses." The broad leniency which Moll accords such patients, in this respect, naturally appears to Schrenk-Notzing unjustified by the canons of psychiatry, or the principles which demand in a given case the complete exclusion of the alternative hypothesis. Joseph Zeissler,* in a discussion before the Academy fifteen years ago, took ground with the jurispudent Hoffman, that sexual perversion is an insanity. At the time, Kiernan pointed out that Hoffman had not taken into account the survivals of racial customs, which made perversion a product of education, nor taken into account the distinction between desire and irresistible impulse. The existence of mixed cases where mental disorder co-exists with and even produces perversions, have occasioned much of the differences in opinion.

The types where the issue of insanity is raised in sexual perversion, are usually the sadistic or active algophilic, necrophilism or the hair-cutters. These types have been most frequently the subject of judicial determination. Necrophilism is a symbolism whereby the necrophiliac symbolizes pain to secure excitement by desecrating the dead. The last Illinois case of this kind occurred in a paroled inmate of the Pontiac penitentiary, aged 18, who desecrated the body of a recently buried girl at Danville, in 1901. The criminal displayed no other sign of mental disorder, but seemed to enjoy the notoriety of the occurrence. The algophilic type is not uncommon in its minor expressions in women who are otherwise normal. Indeed, in biology, active algophilies are found more frequently in the female animal than in the male. The active algophily of the queen bee, so charmingly described by Maeterlinck† and the algophily to which Emerson‡ compares introspection: As

That demon spider that devours her mate,
Scarce freed from her embraces,

are instances of this. In certain hermaphroditic snails the

**Alienist and Neurologist*, 1891.

†*Life of the Bee*.

‡*Poems*.

ejection of a limy dart (*spicula amoris*) is a necessary preliminary to conjugation. That these conditions should crop up in woman inverts, especially those in whom auto-erotism has dulled the normal excitability, is not surprising. While woman is normally the least anti-social of the sexes, she naturally becomes more anti-social than man when she departs from her type.

The case to which I am about to call special attention was one of sadism, which occurred in a woman devoted to church society and charity work, the mother of children and the seemingly devoted wife of a man of standing in the community where she lived. There were defectives among both the paternal and maternal ancestors. Psychic abnormality was far from infrequent. The external life was seemingly correct. The criminal episode was one apparently at variance with the life previously led by the accused. It consisted in the infliction of wounds on a girl taken from a Home-finding Society. There were over 200 wounds inflicted in various fashions; several attacks had been made on the genitals and breasts under conditions which showed realization at once of the unlawful nature of the assault and its voluptuous origin. The girl was, moreover, very parsimoniously treated as to food and clothing. At the outset, therefore, it must be admitted that there are suggestions of insanity. Sadism in women, while as pointed out already as exceptional, is not so excessively rare as might be inferred from the statements on the subject. Indeed, under the ordinary laws of reversion it must occur among women. Among many species, as Havelock Ellis* points out, wounding and rending normally take place at or immediately after coitus; at the beginning of animal life in the protozoa, sexual conjugation itself is sometimes found to present the similitude, if not the actuality, of the complete devouring of one organism by another. Over a very large part of nature, as it has been truly said, but a thin veil divides love from death. There is, indeed, on the whole, a point of difference. In that abnormal sadism which appears from time to time among civ-

*Psychology of Sex. Love and Pain.

ilized human beings, it is nearly always the female who becomes the victim of the male. But in the normal sadism, which occurs throughout a large portion of nature, it is nearly always the male who is the victim of the female. It is the male spider who impregnates the female at the risk of his life and sometimes perishes in the attempt; it is the male bee who, after intercourse with the queen, falls dead from that fatal embrace, leaving her to fling aside his entrails and calmly pursue her course. If it seem to some that the course of inquiry leads one to contemplate with equanimity, as a natural phenomenon, a certain semblance of cruelty in man in his relations with woman, they may, if they will, reflect that this phenomenon is but a very slight counterpoise to that cruelty which has been naturally exerted by the female on the male long even before man began to be.

The history obtainable of the accused, since indictment, indicates that element of satiety which seeks pervert conditions as a source of new excitation. The accused, despite her marital possibilities of sex satisfaction, was addicted to masturbation to such a degree as to believe it had been noticed, and that sermons had been preached at her by the very clergyman who testified to her good character. This belief had none of the mental characteristics of a delusion, but was the product of introspection quite common in sane masturbators. She also caressed dogs and, according to her admissions, these caresses had extended very far. Penis manipulation of the dog preceded coitus. The mental state, as near as could be determined, was that of a desire for a new sensation so common in rouses, hysterics and sated voluptuaries. The girl victim was about fourteen years old at the time she was sent to the accused by a Home-finding Society. She was given quarters indicating parsimony rather than philanthropy in her care. The application sent to the Home-finding Society agreed to treat the girl as a member of the family, and to clothe her and care for her accordingly. A contract was signed to this effect, which was not carried

out despite the wealth of the family. The accused was in the habit of running a toasting fork and scissors into the girl's body when excited. At times she would strike her with a switch or club. The girl's eye at one time was blackened by a blow of the accused, who told her husband that the girl had run against something. At times she used to scratch the girl on her back, neck, face, hips and legs. She would throw the girl on the floor, grab at the girl's breasts and say she wanted to tear them off. At times she would manipulate the genitals, so that the girl felt as if everything was being torn out of her body. She was careful to have the door locked at such times, and even attempted to direct her husband's attention away from any incriminating circumstances. Were there any disturbance that implied the approach of outsiders, the manipulation, stabs, scratches or blows would immediately cease. After indictment and before trial the accused was sent to a sanitarium, where she is said to have presented manic-depressive-insanity. This was not shown in the trial nor in the period immediately following it, nor at the second trial and proved undetectable to the superintendent of the State insane hospital, to which she was sent after the second trial. At the first trial, the jury found her guilty and gave her a penitentiary sentence. The judge granted a new trial, which was held in another county. This resulted in the verdict of guilty and sane at the time of assault, and a verdict also of having become insane since the assaults. There was no evidence of insanity in the acts themselves, and they clearly demonstrated a full knowledge of the nature of the act, as well as full power to refrain. The testimony as to good character offset any evidence as to insanity at the time and before the acts alleged. This testimony was as to the standing in church, society and philanthropic work by people who were in frequent communication with the accused, but who failed to recognize any mental defect. The case presents some parallelism with that of Mrs. Brownrigg.* In her case, however, while there was equal cruelty, also seemingly of a voluptuous character, there was more parsimony.

*Remarkable Trials.

Cruelty to servants was not then viewed with public disapproval. Mrs. Brownrigg took two girls from the Foundling hospital, who at first were treated with some degree of consideration and attention, but as soon as they became familiar with their mistress and their situation, the slightest inattention was sufficient to call down upon them the most severe chastisement. The first girl who experienced this brutal treatment upon the smallest possible seeming provocation, Mrs. Brownrigg would lay across two chairs in the kitchen and then whip her, until compelled from mere weariness to desist. The mistress would then throw water over the victim, or dip her head into a bucket of water, and then dismiss her to her own apartment. The room appointed for the girl to sleep in adjoined the passage leading to the street door; after she had suffered this maltreatment for a considerable time, as she had received many wounds on the head, shoulders and various parts of the body, the other girl was similarly treated. One day having been stripped to the skin, she was kept naked during the whole day, and repeatedly beaten with the butt end of a whip. In the course of this barbarous conduct, Mrs. Brownrigg fastened a jack-chain round her neck so tight as almost to strangle her, and confined by its means to the yard-door in order to prevent her escape, so that in case of her mistress' strength reviving she could renew the severities which she was inflicting. A day passed in the exercise of these most atrocious cruelties, the miserable girl was remanded to her cellar, her hands being tied behind her, and the chain being still around her neck, to be ready for a renewal of the cruelties on the following day. Determined then upon pursuing the wretched girl still further, Mrs. Brownrigg tied her hands together with a cord and, fixing a rope to her wrists, drew her up to a water-pipe which ran across the kitchen ceiling, and commenced a most unmerciful castigation. The pipe giving way in the midst of it, she made her husband fix a hook in the beam and, then again hoisting up her miserable victim, she horsewhipped her until she was weary, the blood flowing at nearly every stroke. Nor was

Mrs. Brownrigg the only tormentor of this wretched being. Her elder son having one day ordered the girl to put up a bedstead, her strength was so far gone that she was unable to obey him, for which he whipped her until she sank insensible under the lash. At length the unhappy girl, being unable any longer to bear these unheard of cruelties, complained to a French lady lodger, who appealed to Mrs. Brownrigg. The only result was a volley of abuse at the person who interposed, and an attempt to cut out the tongue of her apprentice with a pair of scissors, in the course of which she wounded her in two places. The girl was rescued and taken to a workhouse, where she was found to be in a most wretched state, and succumbed soon after. Her body was covered with ulcerated sores; and in taking off her leathern bodice, it stuck so fast to her wounds that she shrieked with the pain. On necropsy the vagina was found badly torn and the uterus dragged out of place. Similar manipulations had been practiced on the other girl. Mrs. Brownrigg was found guilty of murder and executed.

In this case the old idea of the ownership of servants played a part in inducing a defiance of humane remonstrance, which would not have in the early 19th century the same significance it does now. Taking all the circumstances of the first case into account, it demonstrates that sexual perversion *per se* cannot be considered insanity.

In the discussion, G. F. Butler said he had understood nymphomaniac offers had been made to physicians by the Illinois accused woman. J. G. Kiernan said these were simply harlot offers to take medical bills out in "trade," showing a mental state not exceptionally rare in inverts, with regards to normal indulgence.

Emory Lanphear, of St. Louis, had noticed that many perverts, noticeably exhibitionists, brought face to face with the legal significance of their acts and not shown too much sympathy as irresponsibilities, could control themselves. He believed with E. C. Spitzka,* that all the sexual perversities existed at times in persons of indubitable sanity.

**Journal of Nervous and Mental Diseases*, 1888.

He had under care a case of sadistic fetichism in a woman. She had learned masturbation in a convent. She married but found coitus insufficient to satisfy her. After being entered by her husband she was simply excited and had to arise, catch and caress a chicken, and finally wring its neck ere orgasm could occur.

J. G. Kiernan said he had for years held that perversion *per se* was no evidence of insanity.* He thought sadistic perversions were more common in woman than was usually suspected. He had been consulted in the case of an Indiana girl, whom neither masturbation nor coitus satisfied; who enjoyed canine copulation after the dog's penis had been first manipulated, then osculated, then cunnilinctus done by it, then the dog was beaten. She perverted another girl into tribadism and canine copulation, but the last had to precede the tribadism with her. The woman in the case cited by Dr. Moyer showed traces of a similar association of ideas.

W. G. Stearns agreed with Dr. Moyer that sexual perversion *per se* was not insanity. Erotic fetichism of the sadistic type took many quaint forms. A patient under his observation had masturbated to excess and copulated freely. He desired to see his wife delivered of a child, and felt the sight would be intensely voluptuous. Later, the idea became dominant, and he was impotent without it. He was able to be present at many deliveries. He enjoyed most volupity at the delivery of a primipara, where the suffering was greatest.

**Detroit Lancet*, 1884.

EROTISM (NORMAL AND MORBID) AND THE UNWRITTEN LAW IN OUR COURTS.

By CHAS. H. HUGHES, M. D.,

ST. LOUIS.

THE Unwritten Law, upon which our legal brethren seek to secure acquittal for the killing of adulterers, often enticed into improper sexual relations through the siren seductions of confessed adulteresses, as well as without such enticement, is not founded on any psychic law of justice and absolution for the woman. The wiles of women are quite equal in seductive power and quite as freely, frequently and adroitly exercised for the betrayal of men, as the blandishments and promises of men are toward women. The sex is not sinless and psychological science can not so declare.

The power of inhibition of appetite has not been stronger in men than in women since the apple episode in the garden. There woman took the initiative and she has done so a good deal in that direction since, though she assumes otherwise, through a naivete which the persisting adulteress does not actually possess.

Minds of men moved to extenuate or acquit the murderer on the confession of a voluntary mistress, not the victim of masculine violence, do not act under the sway of normal emotion, nor of stable cold reason, but of erotic prejudice against their own and of over-leniency towards the opposite sex. The true psychologist could not sanction such psychically unjust verdicts of this nature as are now becoming too frequent under the so-called unwritten law, which is non-existent

as municipal and not correct as psychological law, or the right law of cerebro-mental conclusion.

Twelve tender-hearted men in a jury box, themselves under the subconscious sway of a woman's silent, erotic power at the time perhaps, and the lawyer's vivid, eloquent portrayal of a ruined home to which the probably seduced seducer has gone, under passion fanned to resistless impulse, and to which the feminine seducer has willingly contributed as *particeps criminis*, sometimes confessing the same, condemn the man, acquit the slayer and let the often equal and associate criminal female go free, and think it a righteous and logical decision.

In ancient heathen mythological conception, the Gorgons, as well as the Sirens, were not engaged in conferring benefit on mankind, and they have not yet in reality all been metamorphozed into saints and angels of goodness toward mankind or toward themselves.

Juries of mere men in the goodness of their hearts, the erotic hypnotism of their own better home influence, are apt at times to forget the psychological truth that evil mingles with the good in the female mind and heart, as it does in working the eroto mental machinery of masculine mortals.

Some mythologist doubted if the mythical Gorgons could have been women. The psychic neurones and blood of these mythologists must have been transmitted to some of our weak-minded American juries, if some of their foolish verdicts in certain erotically inspired murders by women and women-impelled men, may be taken as a basis for diagnosis. The three vicious sisters: illicit love, jealousy and love revenge, or woman spurned and love turned to hate in man or woman, have done much harm in this world, in and without courts of justice.

As an illustration of woman's sometime influence and indifference to the fate of her lovers at times, the following may be noted:

As the result of a duel fought at Wharton, New Jersey, lately, over Rosa Latzky, an 18-year-old Hungarian girl, who told her suitors they would have to fight for her,

Henry Waldee is in the hospital in a badly damaged condition.

Rosa helped to arrange the duel, which was to take place with clubs, in the presence of no witnesses save Rosa and a young man, whom she asked to accompany her to the place. She watched her admirers cudgel each other with their clubs until neither could stand, when she departed with her other friend, and they were married by a justice of the peace.

The duellists were found later by mine employes, both unconscious, and Waldee so badly bruised that he was brought to the hospital.

A similar indifference, to masculine fate and erotic selection, on the "go it husband; go it bear" principle, may be seen any fine day in a barn yard, in the relation of the hens of the family towards two fighting cocks engaged in combat and subsequently by assent, if not by mutual consent.

Women who confess to adultery to their husbands do not usually make confession till they have become convinced that they have by plausible statement, that is plausible to the husband, freed themselves from blame in the mind of the husband. Some do so recklessly, as they may have entered into the adultery, or from remorse or pique and vengefulness at not getting the appreciation or reward sought or happiness expected, especially financial, as happened in one case in Missouri, where revelation of illicit relations followed a failure of compliance for satisfactory financial recompense demanded and threat of exposure, resulting in the duped cuckolded husband killing the adulterer, when the woman herself had been the seducer.

Confessing his persuasive and magnificent personality, they may call the man whom they have helped in the mutual seduction, a brute, a blackguard or other vile epithet, and profit from the jealousy excited, even though it may lead the confiding husband to later insanity or murder of the adulterer, wife and suicide.

Women are frail, uncertain and coy, as the poet has written. They are likewise true, faithful and reliable. But

they are not all to be considered as innocent, stable and true. Infidelity is not exclusively a masculine trait, and when uxoriously inspired murderous tragedy occurs, because of adultery, it were well if justice were not sometimes so erotically illusioned as to see only a feminine angel wronged ("ruined," as the attorney phrases it) by a lecherous fiend in human form, who has met with just retribution at the hands of an avenging masculine angel, though he, himself, may not have been without the sin of neglect or connivance that may have led the unsuspecting, weak and too confiding victim to untimely unwarranted slaughter.

Men may be weak and impure; women may be weak and impure in their erotic spheres of action. The erotically blind lead the blind and both fall into the ditch together, often. Juries are likewise often weak, and when there is a woman in the case, they may be erotically blinded by the radiant emotion of subjective beauty and domestic joy and peace shining in their own hearts, reflected from their own homes of wifely fidelity and see as through a smoked glass only the dark images of the stealthy, ruthless, lecherous destroyer of the fancied peace of another's home, imagined to be only like unto their sacred, happy abodes, but for the ruthless, resistless intrusion of the home-destroying, domestic peace-blasting, happiness-killing adulterer, who ought to be and was righteously shot upon the spot, law or no law of man's contrivance to the contrary notwithstanding, for in the will of the great Jehovah, the work of the fatal bullet, as in the mind of the paranoid, if not paranoiac, Thaw, was, in the view of some, the will and way of God.

Violent, passionate emotion, not induced by overmastering disease, even though it leads to murder, is not essentially insanity. Emotion and passion, though they often go together, are normal qualities of mind and brain. Disease of brain, exciting abnormal emotion or impelling otherwise unaccountable or unjustifiable passion and conduct must exist to constitute emotional or other form of insanity. A brain and mind disordering congestion or other brain disorder must exist to impel beyond the normal re-

straint powers of the will, to constitute insanity that extenuates or excuses crime.

Juries often divide or agree and decide under the varying influences of strong emotion. They sometimes decide against the law and the evidence and the instructions of the court, from emotional influence, as well as prejudice or favoritism. The true criterion, therefore, for gauging responsibility in a case of homicide, where the unwritten law of so-called justifiable vengeance has been appealed to and executed in reckless anger for a real or supposed injury, should be—did disease of brain and not passion for vengeance, so impel the mind, its governing disturbing creature under disease, as to make the deed irresistible. Was the act the result of a whirlwind or cyclone of unrestrainable violence, because of resistlessly morbid impelling state of brain, absolutely beyond the control of the normal and to the individual's natural state of mind, even though the diseased crime impelling brain had knowledge that the act was wrong? New York law to the contrary notwithstanding.

If a limb is broken, the arm or leg cannot be moved aright; if the eye or an ear fail, seeing or hearing is defective or lost. If the brain and its related mind are diseased, its functions are not normal and no law made for the sane and sound of mind and brain can rightly hold to accountability. But impulse and passion, revenge and hate and all acts from normal motive are sane acts. All acts plainly conformable to motive of gain or passion of whatever kind, are *prima facie* acts of sanity. However revolting and disregardful of moral or lawful propriety they may appear, such acts be those of a sane, though morally self-perverted mind.

Many of the cases that appeal to the unwritten law come under this latter classification, and demand the most rigid inquiry from a psychological standpoint, and consideration of all facts, surface or hidden. The study of the woman, as well as the man, should be equal, in the inquiry and the inquiry should be cold and unbiased, as though eunuchs were considering the cause, and it were better if blended with a few eunuchs and men past the prime of life there

were a mixed remnant of middle aged men and women on the jury with the young man, where the *lex non scripta* is pleaded.

The possible sway of erotic emotion were better excluded from a trial wherein the chief cause is erotism, and their swayed and swaying or attendant passions of jealousy, revenge, etc., especially where a tragedy has culminated and is involved in the cause of action. Cool blood, calm brains, strong deliberate brains should be selected for judgment in such cases. Sound psychic conditions should exist in all such juries. In fact, the judicial mind should be in the jury box as well as on the bench. When shall we ever have them in American petit juries? Shall we ever have such a jury when one man shoots another about an asserted wrong to a young and handsome woman?

Since "man's first disobedience and the fruit of that forbidden tree," the overpowering influence of woman has, in certain directions, prevailed with man and no court, appellate or others, has prevailed to lessen that influence. Her influence is generally acknowledged as in the main a good one, but alas! it has been too often an evil one for man's highest welfare. And when she influences man in wrong directions, man marvels at the unexpected evil in her, so "fair, God's eye could look with pleasure upon her face, and so pure." "Oh! if she had proclivity to sin, Nature may leer behind a gracious mask and God himself may be,"—and a giddy blind doubt even of God, overcomes man often when a question as to the purity and fidelity of the woman he loves, flits like a phantom across his trusting mind, such as overwhelmed and astounded Walter, in the "Life Drama."

The "eternal tale" of woman's influence, as well as of her prior sin, has been "repeated in the lives of all her sons," and it behooves men on juries to be cautious as to her story and her power, for there is often an element of doubt, sometimes real, sometimes partially hysterically colored in her testimony, to be taken into consideration by the calmly, judicially minded jurymen, when the unwritten law is appealed to in behalf of the man who has taken her en-

tirely at her word, and without corroborating testimony, kills her supposed paramour.

Juries cannot be selected, except from a panel of the average man, with his natural charitable and protective leaning toward the tenderly regarded, fragile and physically weaker, though often mentally stronger woman, and the legally phrased "sanctity of the home." Judge, jury and the average citizen justly feel that "he, who would lay hand upon woman, save in kindness, is a wretch," and should be treated with due vengeance. But what, if after all, the man be really innocent. The too easily yielding victim of only a woman's wiles—a creature helpless and destined for destruction through her seductive power, as the strong Sampson was, under the powerful, pliant sway of the physically weak, but eroto-psychically strong and designing Delilah.

A blacksmith in East St. Louis sees another man from across the street attracting the attention of his wife at her toilet in her own bedroom, by those gestures and body movements called flirting. Her husband noticing the proceeding goes across the street, accosts the man, a stranger to him, has a few words with him, strikes him down and the man dies. The husband knew not what encouragement the wife may have given. He makes no prudent inquiry before proceeding with the fatal blow, and the prosecuting attorney of the place declines to prosecute on the ostensible grounds that it would be no use, because public sentiment, he said, would let the man go free. He is poisoned into disregarding his lawful duty to secure this arrogant, ignorant murderer, who made himself *ex parte* judge, jury and executioner, in a cause he holds in contempt of the law, which his fellowmen, who protect him by other laws, have made against the crime of murder.

This prosecuting attorney, who has ignored the law against murder, is yet permitted to hold his position as a legal guardian and enforcer of the law. Such men are paranoiac in the sense of being beside themselves in their right appreciation of duty, of obedience to law and the people who make the laws. Such dereliction should be legally punished.

Two men lately in a Virginia city, for a wrong to their sister righted by enforced marriage, together combine after the ceremony, to murder the man because they believe he is seeking to abandon the girl whom they have made him marry. No one has ever learned the man's side of the story. Absolute innocence is assumed for the woman and flagrant outrage for the man, too outrageous for any remedy of law, and the unwritten law is pleaded. The judge wisely advises that such a plea is not entertainable in a court of justice because not lawful, and that dernier resort of otherwise inexcusable criminality, insanity, in most peculiar dual form, is pleaded. And a peculiar sort of medical expert appears to extenuate the crime.

Let us here introduce some points in the record:

The trial of James and Philip Strother, at Culpepper, Va., March 2, charged with the killing of their brother-in-law, William F. Bywaters, moved rapidly toward its conclusion after completion of the expert testimony of Dr. Charles Clark, the alienist.

"Doctor Clark's testimony is regarded as of vital importance to the defense, although the prosecution claims to have enough rebuttal evidence to prove the theory untenable."

The prosecution will put on several witnesses to rebut several statements made on the stand by the Strother brothers that Bywaters had no intention of marrying their sister, Viola, prior to the time they declare they forced him to do so.

The tedium of the trial was forgotten in the interest which attached to the appearance of Doctor Clark, whose presence was known to mean a bringing out by the defense of all the possibilities of its new plea that the Strother brothers were seized with uncontrollable emotional insanity on the night of the shooting—dual reciprocal emotional insanity?

"In my opinion," said Dr. Clark slowly, as Attorney Moore, for the defense, ceased reading the hypothetical question, "the act was an irresistible impulse, and it can also be designated scientifically as impulsive insanity, the

result of a highly emotional state, brought on by many insults to which the accused had been subjected."

"I framed my opinion in this case on the hypothetical question, and I believe it can be logically put into two separate acts. The first when they had received information at various times of wrong-doing on the part of the deceased, and the information accumulated. As I understand, they had a consultation, met and considered, and waited and reasoned and determined finally to tell this young man he must marry their sister or they would kill him." This was an exceedingly deliberate, emotional psychlampsia, not to be found in the domain of clinical alienism.

"Between the execution of the act from the time they made their decision there was an interval. During that interval the mental process was one of peace, as is evidenced by the fact that they congratulated him, and took his hand and kissed their sister. And there the mental process ended. The new process was due entirely to a sudden impulse." (Wonderful psychology!)

"The emotions they had labored under as a result of the insults were dormant in them and became aroused again. I think the emotional condition overwhelmed the intellectual process, and that the act was not committed under full volitional power." (Psychic harmony in psychlampsia!)

"The witness said he thought that from the time the deceased made a sudden break to get out of the room—from that time on until the end of the crime—there was mental derangement." (In both—a marital murderous psychokinesia, so to speak!)

With the conclusion of Dr. Clark's testimony, the defense rested its case.

The State then called Dr. W. F. Drewery, of Petersburg, to rebut Dr. Clark's testimony. Dr. Drewery's experience as an alienist had been in treating patients at the State Hospital for insane negroes.

Dr. Drewery was asked whether the effort of the

Strother brothers to restrain Bywaters from leaving the house had materially affected their mental condition.

"I should say," said Doctor Drewery, "that they were angry—almost to the last degree."

"Were these men, in your opinion, insane?" asked Mr. Keith.

"No," he replied, "I don't think they were insane."

Attorney Lee, for the defense, then asked: "Is the organism of a Virginia gentleman's mind as sensitive as that of any other human being you ever came in contact with?"

"I think so."

"You say violent anger, and in almost the last degree. What is the last degree?"

"I don't understand."

"Can you draw the line of distinction between the last degree and that immediately before?"

"I don't think that can be done with certainty."

The succeeding questions were mainly about the different degrees of mental derangement.

No disease impairing the minds of the brothers is apparent in the testimony of either expert, such as might cripple the mind's power of control and force it out of normal harmony with environment, or out of appreciation of duty to God and the state and people, or depriving of knowledge of right and wrong. There is no impairment of their wills by disease-destroying inhibitory power in the brain's higher centers shown, that might cause uncontrollable morbid impulse.

Nothing appears but the ignoring of the normal restraints and the healthy, but unhallowed display of angry, vengeful, murderous passion, mocking, at the commandment of God and the law of man made in obedience thereto. Unbridled vengeance, that kills a fellowman or woman is not emotional insanity. The most violent play of the passions in any direction is not insanity, though it may simulate an insane passion, which is disease-impelled and not willful, and without motive of vengeance.

The jury in the Strother case* returned a verdict of

*The Commonwealth of Virginia vs. James and Philip Strother for the murder of William F. Bywaters, February term; Culpepper Court, 1907.

not guilty; the judge ordered the crowd to receive the verdict without demonstration. Notwithstanding, there was much handclapping and shouting when the foreman announced, "not guilty," after but one hour and a half's deliberation. Immediately afterward there was a wild scramble over benches and chairs to shake hands with the acquitted murderers. Mrs. James Strother fell weeping into the lap of her husband, and James also cried. Judge Harrison rapped for order, and addressed the jury, several members of which were crying. The judge's voice shook and tears coursed down his cheeks, saying: "Gentlemen, I am glad to hear you say that the chastity of our women is to be protected; that no punishment shall be meted to those who deal with a man who invades the sanctity of the home. I have no censure for your verdict. Go to your homes, and I hope you will find them as you left them."

Attorneys for the defense were first to shake the defendant's hands.

James and Philip Strother, the murderers, said: "It is just what we expected. We knew that we had not done wrong." Commonwealth's attorney, Wood, apologetically said: "We are perfectly satisfied with the finding of the jury. We did our best to present the commonwealth's side of the case and feel that our whole duty has been done."

This trial was but a judicially organized mob, accessory after the fact to the murder and vindicating it. The jury, judge, attorneys of both sides, medical experts for the prosecution and the crowd vindicating and applauding the murderous deed, with no one to speak in behalf of the dead man. Who knows what possible secrets the dead man may have held, or what motives other than the one proclaimed as the woman's honor and the honor of the family, may have moved the brothers to murder.

Here is the remarkable spectacle of two remorseless brothers pleading insanity and rational justification of unlawful murder at the same time, the jury acquiescing in the double plea, and contradictory, all the attorneys approving and the people applauding the verdict in a high court of law, and

the law of the land saying with holy writ, "thou shalt not kill."

What a spectacle in an American court of justice, her scales over-balanced by a burst of erotopathic emotion and the rape of the law justified and approved by judge, by jury, by medical expert and prosecuting attorney, with apologies from the prosecuting attorney.

Apropos of this subject, we give place to a layman's view, as presented by Paul Thieman for Baron Pawel, in the *Denver Post*:

"The acquittal of the Strother brothers in Virginia, who killed their newly made brother-in-law for attempting to leave his bride, presents some curious phases of the 'un-written law' theory. It is true there was a pretense in the trial of showing emotional insanity, but, as the judge thanked the jury and extolled their verdict, it is hardly pretended that it is anything but justification of the exercise of family or private revenge * * * The facts established beyond dispute in the evidence were that the slain man had wronged the sister of the defendants; that he had been induced, probably under compulsion, to repair the wrong by marriage, and that he attempted, at once, to leave on the plea of business in town, whereupon the enraged brothers shot him. The most unfavorable construction of his attempt to go away after the wedding is that he intended to desert his bride. Therefore the 'un-written law' works out, in this case, to be that wife desertion is an offense for which the relatives of the deserted wife had the privilege of inflicting capital punishment, and, moreover, to act as prosecutor, judge, jury and executioners, all in the length of time that it takes to draw a revolver and get it in full action. * * * Another noticeable feature is that the judge who thanked and indorsed the jury for this verdict had in the earlier stages of the same trial emphasized, most emphatically, that no unwritten law would be recognized in his court; that he and the jury were sworn to enforce the statute law, and that would be the only test in the case. As it would be impossible to produce any statute enacting the theory of private capital

punishment for wife desertion, it does not seem that this judge's law is like that 'of the Medes and Persians, which altereth not'." * * * Well said Baron. * * * it is an illustration of the vagaries of any law that is not a *statute law*. * * * While the "unwritten law" is quite specific, the fact that it is *not written* enables its code to be distorted and misused and, *out of sympathy for the accused*, its protecting sentiment may nevertheless be invoked. * * * The Strother brothers broke the "unwritten law" itself, for, according to the "code," they had accepted marriage as reparation and Bywaters was entitled to a decent chance to act like a man. * * * But a dispute arose, hard words were passed and, *in mere rage*, he was killed. * * * Public sympathy, however, gave to the Strothers the immunity of the "unwritten law."

Solomon, with all his wisdom and familiarity with women, confessed his inability to understand the way of a man with a maid. The way of a maid with a man is often quite as incomprehensible, and the way of petit juries with this unwritten law plea and a women in the case is peculiar.

There appear to be times and seasons and places with the American people when and where deliberate reason forsakes them in the face of certain crimes against the law, when an insanoid sort of judgment supplants the cold reason of judge and jury, and this unwritten law craze is one of them.

These crimes of insanoid emotion displayed in such jury verdicts against the law of the commonwealth, which assumes to "command what is right and prohibit what is wrong," and in the present instance approved by the court, appears strange and unaccountable to the psychologist, as coming from supposedly sane and well-balanced minds, with the law to guide them and the command of God to deter them.

If this craze to kill in these cases, on the assumption that "woman can do no wrong," goes on increasing, better extend the application of the *lex talionis* to gradually include them, than make a farce of law and a travesty of

cool-headed justice with subterfuges of non-existent emotional insanity, as a plea in vindication.

There are base, insidious, slimy lechers in this land, as in every other, who creep into the chambers of a woman's soul, "like a foul toad, polluting" as they go, for whom shooting is reward rather than punishment. But how are such to be separated from the weak, unwary man seduced, if the seducer is dead and only the woman's testimony is taken, with none to dispute, and what becomes of the right of the murdered one to have had a hearing and to confront witnesses and charges against him.

The man who with overmastering violence or stealthy drug giving, with wine or otherwise harmless beverage violates an unwilling woman, should meet with condign punishment by law, under fair legal inquiry and decision but never by private vengeance.

It is lame psychology and bad logic that assumes always the sanctity of the home, forcefully, ruthlessly invaded by resistless lechers, before whom virtue must inevitably succumb like a voyager, to "pirate monarch of the main."

The sanctity of the home is, save in exceptional instances, maintained by the true and, many of them saintly women, within the home. The sin of erotic unsanctity, or speaking in terms of less specious sophism, the sin of erotic conjugal infidelity is *prima facie*, a mutual sin in the fully mature not where one is under puberty or lawful age of consent and sexually innocent and no one better knows this fact than the cold, reasoning psychologist and physician familiar with all the phases of the erotic sexual life of man and woman and, as that life is familiar to the student of morbid erotopsychology, such as the alienist, under whose eye so often comes the extremes of sexual erotopathy in man and woman from erotic hypaesthesia and hyperkinesia to sexual apathy senile and premature.

The "ruin of innocence and virtue," "the polluting of the home" are facts that arouse right manhood's vengeful ire and the threatened or violated "sanctity of the home" from erotic, lustful, polluting invasion from without, stirs the innermost feelings of destroying vengeance leading to trag-

edy. But before juries these phrases are often misapplied.

Used as specious catchwords of forensic suasion, not supported by justifying evidence, where the unwritten law is appealed to, and one of the principal and most essential witnesses is dead, and his or her character and possible crime are being passed upon *ex parte*.

Here, more than anywhere else, in view of the dominance of the sexual over the other passions and over the mental stability and inhibitory powers of the brain, too often is the medico-legal difficulty of providing for right law and evidence. One thing is certain, the law should not be in the hip pocket or under the plaquette of the emotionally disordered party, who believes he or she has been wronged beyond remedy, save that of self-decided and executed bloody vengeance.

The line of demarkation between sanity and insanity is often so shadowy that even largely experienced experts in alienism can not always promptly detect it. But when, in a case where the unwritten law for a crime connected with erotism is appealed to in justification of summary murder, jointly planned, a jury immediately acquits, the presiding judge commends, the prosecuting attorney apologizes, the whole audience applauds and the murderers are acquitted on the woman's and their own testimony, thank the jury with expressions of confidence in the righteousness of their act, a state of unseemly emotional and semi-hysteric excitement pervades the audience, not compatible with a normal, steady, unmoved judgment, and Justice is wronged in the sacred temple. Vengeance beyond the law commended, murder rejoiced in; such a place, such circumstances, such scenes of inordinate emotional sympathy do not promise that equal and exact justice, which should always and only appear in our courts of justice from cool, calm, unbiased deliberation upon a matter of such character to man or woman, and when a like and equal justice to all are at stake.

An American jury box, American bench or bar or seat for auditors, are not the places for insanoid emotional displays that lack only the unestablished element of disease

of the psychic neurones to constitute the mental instability of insanity.

From the standpoint of a neuropsychologist's observation in provision for neurone stability, and in right penalties perhaps, for causes and trials of this kind, this subject would appear to require further attention from municipal law-making powers.

The anthropology of man and woman are similar, complementary and anthropopathically reciprocal, as their anthropology is much alike, both neuroanatomically and neurophysiologically in their eroto-sexual spheres, with the super addition to woman of her especially receptive generative apparatus and the ovi complementing the testes. "As unto the bow the cord is, so unto man is woman" in neuroanatomical and neurophysiological life and laws for trials in which she is directly or indirectly concerned, especially where capital crime is the issue, should be made accordingly.

Her testimony and its motives should be weighed with extreme knowledge and caution, from the standpoint of a correct knowledge of erotopsychology.

The anthroposophy of this subject, demands a full and real, not an erotic delusional knowledge of woman's nature, so like unto man in passion, yet variant in display and more secretive.

This knowledge is what we ask in these trials, embracing the anthroposcopy of her artful, artistic and seductive powers of speech and manner to sway man's overpartial judgment on the witness stand, in these erotic murder cases or through what we know of her merit and beauty of character in our own homes, and of her real nature in general, as she really is, so different from, yet so like unto man himself, in her passions, some supremely good, some supremely bad, some indifferent, as men are. This should be considered in every cause wherein the unwritten law is concerned. Not that the woman should be regarded as only good and pure and true, and only man as base and vile. Juries should regard them and their testimony in the light of true, un-illusioned, psychological anthropology.

When there is, or has been a woman prominent in the cause, it is well for the man to severely and strenuously train his logical inhibitions on his judgment, lest he be unduly swayed by overbiased, erotopsychic emotion and mistake the same for sound, impartial judgment.

Recently a man repeats the often recurring domestic tragedy of killing himself, his wife and child under the erotopathic, psychlampsic impulse of homicidal jealousy. No law but the law of extermination for him, the destruction of the unfit to live and he unconsciously thereby saves the good of his race in thus summarily destroying himself as a breeding focus of psychic morbidity, inimical to the erotomental stability of generation that might have directly or atavically come out of the mentally unstable and mismated combination, for like breeds like, in neuropathy and psychopathy, as in generations of a sounder, steadier-neuroned cerebro-psychogenesis.

The constant in and in breeding of the psychically unfit to live for the welfare of the race, is a source of solicitude to the patriotic psychologist and alienist, and thought of remedy of prevention has often presented itself, but how to apply it has been as much of a problem as the belling of the cat to a council of rats. Nature's remedy in the often suicidal violences of morbid jealousy, is a harsh one, but effective, and the race is benefited in the survival of the more stable and normal in erotic neurone life, and consequently more fit to live. This remedy of inexorable nature, remedying its erotic life defects by psychophysical degeneration or suicide is revolting to our tender sense of regard for the life of others. But it is Nature's unfeeling, effective way, the way that prevents idiocy and miscegenation or other defectives going too far in continuation of their vicious kind to the peril of the general brain stability of mankind. The unfit to live thus fall by the way and perish through erotopathically begun and continued degenerative impotential decadence.

Here are some other aspects from England of the unwritten law, so-called, which we give without entirely endorsing the criticism of the paper from which we abstract it.

"Public indignation has followed the sentence of death upon the young man, Rayner, for the murder of William Whiteley, known as the "universal provider." Before the trial and while it lasted English law very properly prevented an expression of public opinion.

"To print any opinion which might have its effect upon the minds of the jury while a case is subjudice is held to be contempt of court, rendering the offender liable to a severe term of imprisonment, but now that the trial is over the newspapers are full of angry letters denouncing the sentence of death, especially as the judge said the prisoner need not expect any reprieve.

"Raynor claimed that he was an illegitimate son of Whiteley, and had his mother's evidence in support of the allegation. In fact, he called himself Cecil Whiteley, when he was charged with the murder.

"He was married, and, with his delicate wife and two children, he came to London, starving, and went to Whiteley for assistance, hoping that his father would help him obtain employment.

"He had a revolver with him, with which, he said, he meant to blow out his own brains in the event of his father's not doing anything for him. He did not want money, but work.

"Whiteley declined to help him, and, so Rayner says, told him to go to the Salvation army for assistance. In his weak, nervous, and starving state that made his blood boil, and he was raised to greater passion when Whiteley sent for a policeman to have him removed. He then fired at Whiteley and followed that up with shooting himself through the head, blowing out one of his eyes. Whiteley died, but Rayner was nursed back to life.

"Was Rayner justified in taking the life of this man, whom he called father? The controversy, through the medium of the country's press, is heated, but a great majority of opinion is on the side of the condemned man. The country is horrified that a young man should have to undergo torture under the surgeon's knife and be nursed back to life only to be given up to the hangman,

“Laurence Irving, son of the late Sir Henry Irving, thus voices the general feeling throughout the country when he asks ‘if Rayner, under the stress of hunger and its attendant miseries, having pawned everything down to a woollen muffler, believing that the man to whom at last he appealed for help was his father, or, in any case, knowing that he had been connected with his mother’s family to its dishonor, and that, being refused assistance, he shoots William Whiteley and then himself, can anyone question that in the moments when he lay moaning on the floor asking only to be allowed to die, and in the succeeding days and weeks, when that sad, wrecked, loathsome thing, his life, was being given back to him, can any one question that in that interval he suffered all and far more than all pangs of hanging.’

“‘An idea at which public conscience revolts is that of Rayner undergoing a more awful measure of punishment than Chapman or Deming, who tortured their victim to death, or that hideous Jack the Ripper would have done had he been caught. To the plain nonlegal mind this is not justice.’

“Thousands of letters written in the same strain say if Rayner is hanged it certainly will afford a strange exemplification of the peculiar workings of English criminal law. Only a month or two ago a young man in Brixton, one of London’s suburbs, stabbed to death a girl who did not reciprocate his affection as he wished; yet his story was considered so pathetic that the death sentence was commuted on the ground that he was insane at the time he committed the act, and in six months’ time he will be a free man again.”—*N. Y. Herald*.

A candid consideration of the above and the views of other popular writers and persons on these and similar features of the unwritten law sentiment, suggest that there is something even in the normal psychology of the subject, which has not yet been adequately met by such legal provision as would take proper punitive law, *lex talionis* and *lex non scripta* out of personal hands and place them in the courts of justice.

(*To be continued.*)

THAW'S PARANOIAC MORBID EGOISM.

By C. H. HUGHES, M. D.

ST. LOUIS.

A PRESS REPORTER sitting in the court room of this famous trial has builded better than he knew, one of the foundations of Thaw's abnormal mental state. It is that morbid state of mind which, in Thaw's speech and conduct shows intense abnormal egotism, the exaggerated egotism as testified to by medical experts Evans, Wagner and others, founded in the delusion that he has done a justifiable, righteous deed of retributive vengeance approved of God and applauded of men and women, in slaying the demon who has menaced his mind and his life. "When the world shall know in full the motive of the deed and the character of his victim, the despicably damned, stealthy destroyer of the virtue of trustful maidenly innocence, it and God will, in his morbidly erotopathic delusion, justify and applaud the taking of White's life and the violation of the law, and set him free with honor and gratitude." Here is the potent press portrayal, unconscious of its alienistic significance, of that picture which marks mental disease upon the thought and action of this man.

"Something of the pomp of a general suggests itself in the demeanor of Harry K. Thaw in his trial for the murder of Stanford White. He seems ambitious to push the campaign. There is no listlessness, no timidity. He is impatient for the crux of the trial, else his manner belies him. He can hardly wait for the climax. He is the same Harry

Thaw he was on the night of the Madison Square garden tragedy, when he strode into the police station with his head up, his shoulders back. He slapped his breast with his hand, "I am the man who did it,—no, proclaimed it!"

"Modified, of course, his attitude is the same. He marches into the court room with the alacrity of one who is used to the center of the stage as his right. The eyes bent upon him from the thronged court room are so many spotlights. He sees them all. He looks around to see if they are there.

"Over to one side are tables creaking under the feverish writing of a host of reporters, correspondents. This is the press. Ah, the press is another spotlight.

"The man who "did it" is here. He has waited since last June to tell it. He thinks he is going to tell it in a few days, and is more eager than ever. Maybe, his lawyers will say differently, but he does not dream of that. He feels that he is there to re-enact the tragedy.

"Behind Thaw, the ambitious general, sits his first reserve.

"There are five women sitting behind there, three in somber garb, the other two flashing with purple in their attire.

"Of the latter, the small, insignificant one, with a pair of startled eyes peering out through a thick, smothering veil? What of her! For her he slew.

"Is Harry Thaw's sense of importance felt toward the public, or is it all to impress the mite of humanity? (The trial shows both.)

"There are the other women. That white-haired one is his mother. She has a clear eye and a good color. She has courage.

"He never had to pose to her as a hero. She always thought he was one, where even his most indulgent friends realized the bitter truth. She is the most loyal one of all, the most hopeful, perhaps. She is his mother.

"There is another woman, a countess, made so by marriage.

"There is another, a sister, one more commonplace.

"Now the other woman. The other one wears colors. She comes from the chorus girl ranks where the wife graduated."

These five women make up the feminine part of the auditors in whom he is most interested and whom most of all he wishes to behold his triumphant vindication. But there are others, the great audience of onlooking women for whose virtue he has valiantly stood, and men who have wives and daughters, and the jury who will weigh the scales of justice, and read the weight of evidence of his valor, and the judge and attorneys, who will help in the weighing, and the witnesses who are to tip the scales so pronouncedly in favor of his great and meritorious achievement of avenging blood." No show or line of remorseful regret mantles the face of this egoistic paranoiac, as he looks with exuberantly conscious assurance, though that assurance be that of morbid delusion not yet justified by the revealed facts, upon the great audience of the crowded court room, ready and eager in his morbid imagination to proclaim the glory of his great act of retribution. "His act and God's."

The world is full of egotists who, without just warrant in personal ability or merit, esteem themselves far above all reasonable warrant. The reckless plungers in finance, the despicable, obnoxious, smart-Alex's and egotists of society who obtrude, out of their proper place, in so many spheres of action where sensible men only should be, are of this class, but here is the egotism of a morbid egoism, which makes a remorseless delusive merit of shedding human blood, for a delusional personal danger and an old wrong, real or apochryphal, told of, and if real, condoned in conjugal alliance and passionate love of the woman wronged after two years of illicit amour.

This mentally deranged man of morbid egoism and fear of enemies and persecution, distrustful of his own counsel, autocratically dismissing and changing them because they wished to establish exculpatory insanity, is fearful that

he will be pronounced insane when he knows he is not mentally deranged.

He doubts the sanity of the medical experts who observe him and are testifying to his insanity. "They do not understand him." These opinion witnesses had, in the beginning, great difficulty in getting audience with him. Later he courts the examination of the lunacy commission because "he knows he is perfectly sane." When the experts first visited him he regarded them with suspicion, though introduced by a friend in whom he had yet faith (Mr. Hartridge) and left them abruptly without asking to be excused, though he has been gentlemanly reared and accustomed to the manners of a gentleman.

He looks with delusional confidence and pride upon the judge, the jury, the audience and his family and upon the insanity commission. "He has done a righteous deed." He is confident, hopeful and anticipating triumphant vindication. "The murder was of providence, an inspiration and his wife an angel, not fallen but cast down by treachery and violence. He is the greatest and the best of heroes, an avenging nemesis who before all the people, killed the infamous one and with weapon in hand and uplifted arm had let all see and know he did it. Openly done as Booth's shooting of the good Lincoln, boldly proclaimed and with no attempt at escape. He now sits satisfied before the tribunal of the people, hopefully awaiting their plaudits of well done, after the jury shall have set him free for his glorious deed of providentially directed vengeance. He industriously and interestedly examines and attends to his correspondence, paying no attention, most of the time, to what the medical experts are saying about him, because in his self-laudatory delusion the end will be a sure vindication. It is all right anyway; in his mind, all will be, must be right. He will be acquitted with applause for the righteous murder of the man who, before he knew her carnally or had conjugal claim upon her, had also carnal unlawful commerce with his wife as he had later himself, and for two years before his marriage to her." He faces the commission of inquiry into his sanity or insanity

of mind with confidence of a verdict of sanity and he is right in his egotistical conviction, "for the inquiring commission are men, like himself, though one is a physician, and would have acted the same, had they the same knowledge, the same courage, the same wrong to avenge, the same conviction, the same support of Heaven." In advance of their decision he complacently receives the righteous verdict as he regards it, of his sanity and the jury's just verdict of acquittal, for in his own mind he has done a glorious, heroic deed. But lo! the jury has in his delusioned view, made a grave mistake. "It has failed to see the glamour and the glory of his great and meritorious deed of death and salvation. But the commission of inquiry has concluded aright. He is sane! The jury did not see aright. They were divided, some of them even thought him guilty, though he had removed from the earth a malefactor who to his certain knowledge had dishonored his wife in her girlhood before he himself took her as his concubine and traveled with her for two years under an alias." In his exaggerated morbid egoism what he did was alright. All and every one who came across the mental orbit of his morbid egoism were all wrong and he has a way of righting every evil and will use it. "He will go to jail to be bailed out soon, he thinks, and a new trial with new attorneys and new judge with broader views and a more appreciative, sensible and sympathetic jury will see him and his cause aright and indicate both in a just verdict of freedom *cum laude*."

To these insane convictions we add another reporter's view in contrast to that the delusioned Thaw had of his deed of blood and this reporter's view is the view Thaw would have held of himself had he been sane. But had he been sane, though the same deed of blood might have been done by him, he would have done it at another time and place and if possible, with reasonable effort at concealment and escape. Thaw's delusion of his wrong and his insane state of brain, did the deed in the manner and place in which it was done. It was done when, where and in the manner it was, because in his morbidly delusioned state of mind it

was the time and place and he the heaven chosen actor of a great and glorious deed.

"Jealousy of his beautiful wife, whose lustrous eyes and artist model figure thrilled even the pampered profligates of the Rialto, led Harry Kendall Thaw, the spoiled scion of a wealthy and indulgent family, to kill Stanford White at Madison Square Garden on the night of June 25, 1906. The young millionaire believed White was seeking to separate him from his wife and emotional (?) insanity is the plea on which his attorneys hope to save him from the electric chair.

"No mystery veils this remarkable case. Thaw killed his man where all might see, and held the smoking revolver in his hand until a policeman took him by the arm. The openness of the deed incited the greatest speculation as to the nature of the defense. Not once in the long seven months which passed after the prison doors had closed behind Harry Thaw has the slightest intimation been given as to the plea that would be offered. One million dollars may be spent to save Thaw from the death penalty—half the sum already has been spent.(?) An assistant district attorney remarked at the time of the killing:

"This man thinks he can get out of this scrape as he would avoid trouble after he broke a barroom mirror—by paying for it."

If Thaw goes free, he will re-enact perhaps another tragedy of horror, if similar adequate or fancied provocation shall again disturb his paranoically unstable brain and provoke another deadly mental explosion. Such may be confidently looked for, if his future like the past, be an unbridled career of self-indulgence without asylum control and treatment to restrain his hitherto unregulated and abnormal inhibitions. It will be a misfortune for him and his family or friends who may come intimately near this paranoid psychopath if he should not be subjected to a long period of mind steadying restraint, free from all the vicious indulgences and non-regulation to which he has become accustomed by an erratic paranoid life, that brooked no restraint and knew no guidance but the impulses, propensities and dominating passions of his own "sweet" and erring will.

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CHAS. H. HUGHES, M. D., Editor.
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EDITORIAL.

[All Unsigned Editorials are written by the Editor.]

THE UNQUALIFIED EXAGGERATED EGO as a defense of erotic brain-storm murder was brought into requisition at a recent murder and unwritten law defense trial at Carthage, Mo., in the case of the State *vs.* Sanderson.

In this case the prosecuting attorney said there was evidence of an exaggerated ego, in that the defendant thought himself providentially called upon to avenge the ravishment of his wife.

Sanderson shot Doctor Meredith at the Sanderson home early in the morning of January 2, after having telephoned for the physician to come to his home to prescribe for Mrs. Sanderson.

In his defense Sanderson claimed that Meredith was advancing upon him with an upraised medicine case and his right hand to his hip pocket when he shot him. Mrs. Sanderson told the jury and the jury accepted the improb-

able, if not impossible statement, unless Dr. Meredith was ambidextrous, of Meredith's alleged advances to her and corroborated the statement of her husband, the defendant, in regard to the shooting.

She testified that Doctor Meredith, who had been their family physician, had made love to her when she went to his office to consult him.

Later, when one of the Sanderson children was ill and Sanderson wanted to send for Meredith, Mrs. Sanderson had demurred and said that some other physician should be called. Sanderson insisted upon knowing why she objected to Meredith, and Mrs. Sanderson detailed her experiences with him.

Sanderson immediately left the house and soon returned with Doctor Meredith. Before Mrs. Sanderson, he accused the physician of ruining his home and shot and killed him.

In his dying statement Dr. Meredith denied criminal relations with Mrs. Sanderson, which was probably the truth. The woman had probably made a derogatory statement about Dr. Meredith, for a woman's reason, which after the disastrous result and to save her husband, she exaggerated probably into coerced adultery which, though unsupported, the jury accepted as absolute truth and justification.

While protecting the purity of the home it would be well if juries would consider the possible purity and honor of medical men in spite of erotopathically framed stories of morbid hysterical women, eager to make impressions on their husbands of other men's attentions. There is a kind of morbidly-minded, overly erotic woman who sees the masher and the flirt in every genteel man they meet who innocently looks upon her. Such women are ready, for motives peculiar to this peculiar class of the sex, to say to their husbands and lovers for jealousy exciting effects, that such and such men lust after them. Such giddy females, to whom love is their whole existence, do not realize what they do sometimes with the passion of certain impressionable men who sustain the closest of human relations to them, when they disclose hysterically colored, illusory

romances of erotic adventures from forbidden sources, till the unexpected awful tragedy happens. Then, in some instances at least, they tell of their shame, which may never have happened, to save the life of the rash, impetuous loved one, who under the unwritten law then regards no other life as sacred than really, or in feminine fabrication, passes between him and the woman.

Making a clean breast of infidelity and ruin, as if women were babes and men were beasts, going back to the wronged, forgiving husband and saving his life by the terrible sacrifice of really or falsely testifying to her own shame and weakness and the man's great over-powering wrong, and swaying a jury into forgetting the law and their obligations to society and logical truth in their deliberations, is becoming a problem in psychological anomaly closely verging upon the morbid.

Brain-storms are "sudden and severe paroxysms of cerebral disturbance." Psychokinesia and psychlampsia are the technical terms of this state of mind connected with insanity. Explosions of violence, in the height of passion, may be sane displays of temper, but when morbid, with a well-laid foundation of disease affecting the brain, they are evidences of insanity. To constitute insanity, psychlampsiæ, psychokinesias, brain-storms, or plain explosions, of blind passion must have a brain affecting disease basis. Otherwise they are just plain giving way to violent reason-blinding, punishable passion.

THE JOURNAL OF INEBRIETY, is now united with *The Archives of Physiological Therapy*. It will hereafter be published as a part of *The Journal of Inebriety*. These two very able periodicals will move on as two souls with but a single thought and two hearts that beat as one, in editorial management. The management thinks the scientific value of both will be greatly enhanced by this concentration.

The merit of the high contracting parties make the marriage appear auspicious and our auguring mind, knowing both sources, assures success for the joint adventure.

PYROPHILES AND PYROPHOBES are not uncommon among the insane, who love to see and make fire or dread and fear fire from pure love or aversion of a diseased brain, without special delusion on these subjects. The diseased impulse with them to burn or see fire or to dread fire is a simple delusive feeling.

PARANOIAC, PYROMANIAC AND HOMICIDE are rarely combined in one person. Such a case is lately recorded by the Associated Press as occurring at New Martins, Virginia, where on January 30th, claiming that God had instructed him to burn the town of Smithfield, Harry Howard was arrested there recently as he was emerging from a hotel, which, it was said, he had attempted to fire along with three other buildings, from which flames were bursting. The fires, however, were extinguished. Howard resisted arrest, and before he was captured, shot and probably fatally wounded one man and injured others, including the Chief of Police.

THE ST. LOUIS ALAMAGORDO TUBERCULOSIS SANATORIUM, located in New Mexico, represents a practical philanthropy worthy of ample support by St. Louis philanthropists and emulation by other cities. The atmosphere of New Mexico admits of curative open air treatment most of the year and the promoters of this merciful movement are wisely constructing a forty-room building in addition to the tents provided in order that the patients may get the right sort of fresh air at all seasons. The exclusive tent idea for every day in the year is a fatal fad and has caused many early deaths of consumptives forced to live in unfloored, unheatable and too lightly walled tents in inclement weather such as would make a well man ill.

The rates for medical attention and maintenance will be as low as seven dollars per week.

Detached from building, canvas tents and a main administrative building are in the plan.

A Sanatorium Magazine is contemplated, to explain the

work and disseminate special information concerning this praiseworthy institution.

The present directors and promoters include Mayor Wells of St. Louis, Paul Brown, E. Wilkerson, Geo. Frankel, C. F. Hatfield, M. P. Moody and others.

If this scheme is carried on from the start on perfectly antiseptic lines, so that it will not become a nucleus for the dissemination of tuberculosis, as Mentone and other places have, and as a pure philanthropy it can be made more than sustaining and do a world of good to moderately circumstanced people, who have upon them the great incubus, mental and pecuniary of one or more tuberculotics in their families. The depressing influence of a tuberculotic to himself and to those bound to him by ties of consanguinity and natural associate sympathy, can thus be removed and that psychic buoyancy so essential to the promotion of recovery in any disease can be brought to bear by removal from home to the better sanitary environment of a New Mexico mostly out-door home.

The meats and milk, as well as the atmosphere of New Mexico, are less likely to be tuberculotic than those of large Eastern cities. The Government's Inspector last January, at Trenton, New Jersey, found twenty-five out of fifty hogs tuberculotics and they probably were not fed on garbage as infected as that of our St. Louis Chesley Island either.

Devising distant sanatoria for tuberculotics and feeding people infected food and drink and on the foul germ filled air of city street cars, etc. is essaying sanitation at but one end and that not the most effective.

The best time to quench the fire of disease is to not let it get a start. Chesley Island hog feeding is an unsanitary and murderous blunder and crime. To whose tables do the hogs go or to what use are they put that are fed on Chesley Island garbage?

A STRANGE PROCEEDING in the Thaw trial required the experts to establish insanity before testimony would be admitted on the subject.

Experts should have all the facts, whether obtainable from lay or professional source, whether from personal observation or the testimony of others. The claim of insanity should have the chance of proof from all the testimony. The hypothetical case should be a complete life biography.

IT IS UNFAIR TO THE INSANE to have lawyers or laymen on a commission of inquiry as to a strictly medical question. Such a commission should be composed only of clinically experienced alienists to do justice to a supposed insane person. Insanity is a disease of brain disordering the mind and should be diagnosticated, as other diseases are, by doctors of medicine, not by lawyers and laymen. No one would think of diagnosticating any other disease after the manner of the New York commission in lunacy.

IT IS UNFAIR TO AN INSANE PERSON to pronounce him sane because he may appear to be able to advise with his counsel as to the conduct of his case. This is the unfair criterion in Thaw's case.

IN INSANITY, APPEARANCES ARE DECEPTIVE to the non-expert. The "knowledge of right and wrong test of insanity" is a wrong and unjust criterion for insanity. Insane persons may appear to have that knowledge and acknowledge that they have, as they will insist that they are sane, while yet they do not have the knowledge of right or wrong as a sane man does.

THERE MAY BE GRAVE BUT MASKED DELUSION behind an insane man's abstract knowledge of right and wrong. In insane psychlamnesia insane persons have been resistlessly impelled to murderous deeds they knew were wrong and against their normal inclination even while imploring to be restrained and prevented.

"The existence of this form of insanity is now too well established to be questioned by those who have any scientific reputation to lose."—*I. Ray, Med. Juris. Insan.*

APROPOS OF H. K. THAW "It must not be forgotten that the author of our being has endowed us with certain moral faculties comprising the various sentiments, propensities and affections, which, like the intellect being connected with the brain, are necessarily affected by pathological actions in that organism. The abnormal condition thus produced may exert an astounding influence on the conduct, changing the peaceful and retiring individual into a demon of fury or at least turning him from the calm and quiet of his lawful and innocent occupations, into a career of shameless dissipation and debauchery, while the intellectual perceptions seem to have lost none of their ordinary soundness and vigor."—*I. Ray.*

DEATH OF R. HARVEY REED OF WYOMING.—Dr. Harvey Reed of Rock Springs, a former member of the Wyoming state legislature and a prominent Republican politician of Sweetwater county, committed suicide in a hotel at Los Angeles, Cal., by sending a bullet into his right temple.

The suicide is attributed to ill-health and despondency.

Reed had been living at the hotel for several weeks, and during this time he had been confined to his room in charge of a nurse, who accompanied him from Wyoming. It is said that while the nurse left the patient for a few moments to-day, Reed procured a revolver in the room and ended his life.

For several years Dr. Reed was surgeon for the Union Pacific Coal Company. He was superintendent of the Wyoming general hospital at Rock Springs for several years and was surgeon general on the staffs of Governors W. A. Richards, Deforest Richards and Fenimore Chatterton.

Dr. Reed was a self-made man of great force of character. A good surgeon and a good friend. We send his family and associates the condolences of a friend. He was our traveling companion along with Drs. Senn and Griffiths from this section of the country to the last International Congress of Medicine at Madrid.

A RATIONAL AND VILLAINOUS BRAIN STORM.—A St. Louis restaurant employee expecting fifteen cents more pay than was paid him for a day's work went into the restaurant with his knife open because he "expected trouble" as he confesses and "was mad" and fatally slashed the proprietor in the back and side. This is another phase of the unwritten law that should be written plainly in the severest legal punishment. There is a wide field for legal punitive education here as in other forms of the personal practice of *lex taliones*.

Because he believed he was being cheated out of 15 cents, Roy Spurgeon, of No. 2647 Olive street stabbed William Amenda, manager of the restaurant at the Portland Hotel, No. 1817 Market street, five times.

The restaurant was crowded with people at the time. One patron sprang to the door and locked it as Spurgeon was trying to escape. Another, whose identity was not learned, struck Spurgeon on the head with a chair, rendering him unconscious and gashing his scalp.

Blood flowed freely over the floor of the restaurant and excitement prevailed for a few moments. Sergeant Fields, of the Central District, and two patrolmen took charge almost immediately.

The trouble arose from a misunderstanding about the amount of wages to be paid. Spurgeon said that the agreement was \$7 a week, while Amenda contended that it was \$6. He was paid 85 cents, the amount for one day at the lower rate. He demanded \$1.

"I went into the restaurant with my knife open because I expected trouble," said Spurgeon last night. "I was mad, and when he started to push me towards the door I began to slash."

JOHN ALEXANDER DOWIE, the new prophet Elijah and founder of the New Zion, before death was translated from the overseership of the Church of Zion to the realms of senility and dementia senilis, where the wicked cease from troubling and the weary are at rest. Here is the record of his career.

CHRONOLOGY OF DOWIE AND ZION CITY.

Lands in San Francisco penniless, 1888.

Locates in Chicago, 1890.

Launches religious crusade, 1892.

Wins a large following, 1893-1898.

Buys site of Zion City, Sept. 3, 1900.

Dedicates the city, May 30, 1901.

Declares himself Elijah II., June 2, 1901.

Spectacular crusade for "restoration" of New York, Oct. 14-Nov. 8, 1903.

Zion City temporarily in hands of receivers, Nov. 24-Dec. 6, 1903. Shows statement of \$14,000,000 assets over liabilities.

Begins tour of world, Jan. 1, 1904.

Visits Australia and returns through Europe, January to June, 1904.

Announces Mexican colonization plans, May 22, 1905.

Suffers stroke of partial paralysis, Oct. 1, 1905.

Second stroke leads him to depute overseers to care for Zion City, Dec. 19, 1905. Goes South for his health.

Removes Overseer Speicher, Jan. 20, 1906.

Reported dying in Jamaica, Jan. 29, 1906.

Appoints Wilbur G. Voliva executive head of Zion City, Feb. 8, 1906.

Said to have mortgaged his home and stable at Zion City, March 7, 1906.

Zion Bank declines to honor his drafts, March 11, 1906.

Overseers determine to ignore his orders, April 1, 1906.

The whole ending in a receivership appointed by a civil court and the rational disposition and settlement, sees illusion, hallucination or delusion, of this modern miracle of folly.

Truly the unstable neurone is abroad in the land, for other similar follies are yet alive and people termed sane embrace them.

OHIO INSANE ASYLUM EX-EMPLOYES INDICTED.—The Athens, Ohio, County Grand Jury, Feb. 23, returned five indictments against former employes of the State Insane Asylum for alleged cruelties practiced against inmates of the institution.

Three of the men were indicted for second-degree murder in "tramping out" an inmate.

This is what should be done with men or women who strike the insane. Cruelty to the insane often comes of ignorant retaliation and a disposition on the part of some green attendants to display their physical powers. New attendants often do not realize that violent acts and foul insulting language of ordinarily apparently sane acting and speaking insane, are the outward expression often of some silent delusion.

These violences suggest that only trained nurses should be employed to attend the insane and that every hospital for the insane should have its training school for attendants upon the insane who should be trained in the gentle handling of these peculiar patients and in understanding of them and their claims to sympathy, tender care and extenuation of wrong acts and speech.

"He that would lay hand upon a lunatic 'save in kindness,' as he who would strike a woman, except when in peril and in self-defense, is a wretch whom it were base flattery to call a coward."

The remedy for this evil and crime against humanity, is to train nurses for the insane and employ only such, paying them good wages and debarring the politicians from naming them. The day of the political management of insane hospitals is past, for our day and generation, of an awakened and active public conscience.

TOXIC INSANOID STATES AND DELIRIUM WITH CONSCIOUSNESS. CROTHERS in Vol. 28, No. 2, of his journal of inebriety, which is a journal whose aim is the promotion of sobriety, gives a number of instances well worth reading of what he is pleased to term unrecognized toxic insanities, a rather too broad a term perhaps for the clinical facts related, but the facts are worthy of record and study. Alienists know about them, but medical men in general do not always recognize them as they ought and even some alienists.

These alcoholized brain conditions are insanoid states or delirium modified by more or less of consciousness.

POOR OLD DR. DOWIE, says the *Christian Register*, "has gone the way of all the earth, and his deluded followers will gradually sink back into the mass of the populace, and be lost to view. Whatever property is left under the control of the church will, as in all such cases in the past, gradually become a trust, and finally disappear from public view. Dr. Dowie was half-deceived, no doubt, in regard to himself; and he was wholly mistaken in his belief that his claims to inspiration and healing power were sufficient to give him such popular currency as Christian Science has had under Mrs. Eddy. He caught a multitude, but not the people at large. There was always to the general public something of the grotesque in his attitude and claims which made it impossible for him to win general confidence. Since time began men of this kind have arisen in such numbers that the world is never without a representative of the class. They will continue to come until common sense, one of the rarest of gifts, becomes universal," and let us add until that class of people that flies off at a neurotic emotional tangent, at every new "wind of doctrine" becomes less in number than now, through a more trained stability of mind and brain beginning in the cultivation of neurone stability in school life and *ab initio vitæ, ante partem*, at conception and before. When the clergy enjoin that what God has joined together let no man put asunder, let them be sure that God and not violated and perverted

nature hath not through them, joined in God's name psychical and physical incompatibles, the baleful point of whose conjugal union may not be psychic neurone instability and psychic caprice and even, in social, moral and religious affinities and conduct.

AN OVER BRAIN STRAINED SIGNAL MAN BECAME INSANE, stopping the traffic on the Great Northern between Leeds and Bradford, England, for a time, but his insanity was fortunately discovered in time to avert great possible calamity.

His wife thought he became unbalanced by overstudy on social and economic questions, but this was simply the direction his over-worked mind took as he was breaking, these questions of the day being in the line of his intellectual taste. Men must think about something. He is said to have been a man of exceptional thoughtfulness and knowledge, for his station, on social and economical subjects, believing he had a divine call from work.

The man went mad suddenly in his box, but fortunately set all the signals at "danger" before deserting it. He locked the door at midday, walked down the line, and told a plate layer that God had commanded him, in a vision, to go out and preach the gospel to all the world.

The laborer paid no attention to him, thinking he was joking, and Storey went on till he came to another signal box. There he repeated his story to the signaller, who promptly wired to the stationmaster at Laisterdyke.

In the meantime about a dozen trains had drawn up on the line near Laisterdyke, and the wildest rumors began to circulate among the passengers. A new man was put in Storey's place and the line was quickly cleared. Brain disorder in its prodromal state should be looked for as well as color blindness, and guarded against by railway officials.

THE STRENUOUS UNRESTFUL LIFE of railway engineers has many untimely endings like the following though not in precisely the same way. When will the right influence of the medical profession be felt and good financial

sense as well as right charity toward employes, prevail among railway managers?

The brain has its limits of endurance beyond which it can not go, as the less delicate machinery of man's contrivance. Over-tired brains are dangerous at the throttle or the keyboard. In this instance it destroyed the engineer. In others it destroys the trustful travelling people.

"J. F. Dunn, an engineer on the Illinois Central Railroad, on the fast train between East St. Louis and Carbondale for sixteen years, committed suicide Saturday night in his room at Carbondale by taking cyanide of potassium.

"Dunn and his brother-in-law, Charles Wright, who had been acting as his fireman, retired at the end of their run Saturday night, and Dunn, who had been despondent for a week because of an accident to his engine said he would take some medicine and go to bed.

"Wright soon knew that Dunn had taken poison and summoned a physician, but to no avail." Not suicide, but brain strain self-destruction.

INADEQUATELY QUALIFIED PSYCHOLOGICAL EXPERTS—In the criminal jurisprudence of insanity one of the gravest dangers of the day is the acceptance by the courts of witnesses as experts who are inadequately qualified because of insufficient clinical experience or profound study of the subject. In questions of homicidal insanity, medical fools, with scarce a scintilla of proper qualification may always be found willing to rush in and testify as experts, where the angel of an honest conscience and the counsel of a properly trained judgment and experience would fear to tread. Such medical men see in any extreme mental makeup of conduct and brutal violence which would not be possible to themselves, evidences of insanity and boldly so testify and characterize as insanity only, that which is heartless or reckless violence. Their criterion is simply their inner consciousness and not experienced observation; what they imagine ought or ought not to be. They offer this under their solemn oath as experience founded expert opinion.

And alas for justice, and the welfare of communities and the moral progress of society, learned judges often admit and sustain as legal evidence such ill-founded and usually erroneous medical guesses which then pass as legally scientific opinions. Under such wrong proceedings the innocent, by judicial connivance, are often hung, while the guilty as often go free.

Great crime is thus sometimes condoned by immunity from the righteous vengeance of the law and innocence is made to suffer its direct penalties. Dishonest or consciously ignorant expert medical testimony is perjury.

THE FARCIAL TRIAL of Thaw's sanity before a mixed commission, such as the New York law sanctions for determining the question of mental disease or mental soundness, by asking Thaw only such questions as bear upon his capacity to advise rationally with his counsel, is *coram non judici*, and ought to be so declared by revision of the New York statutes.

INSANITY IS A DISEASE for doctors to decide by something more than asking questions, and by asking questions not subject to limitation by the court. Thaw should have been questioned as to why he shot White, and as to the time and place and the manner he did, and what he thought about the dead now and thought then, and why he did not have White indicted instead of killing him, and how he felt and thought about the deed after, at the trial and before.

A personal examination by medical men for all possible objective symptoms should have been made medically of a patient as to insomnia, constipation and other symptoms, as any other person afflicted with a similar disease would be. If the question is not one of possible mental disease, physicians should have nothing to do with it; if it is a disease, the question of mental disease diagnosis is beyond a lawyer or a layman's province. The latter should not have been on a medical diagnosis commission. A com-

missio de lunatico inquirendo should be one of medical men only, employing medical methods of examination without restriction through order of judge, or of objection from attorneys. Insanity is a medical question. Mental soundness or insanity is a medico-psychological question.

“‘BRAIN STORMS, THE ‘EXAGGERATED EGO,’ A LAYMAN’S VIEW if it is a mark of insanity, did not leave much of the insanity in or out of the Thaw case unexplained. Now another expert has covered everything that was left with the ‘brain storm.’

“What juries are expected to believe is that people with exaggerated egos who have brain storms, are not responsible for their actions. But the history of this country and of every other is wholly contrary to that theory.

“History shows that most of the trouble in the world has been caused by people with exaggerated egos, who deliberately formed the habit of having brain storms as a method of having their own way.

“They discovered that their symptoms of brain storm are terrible to the timid. The storm might have been genuine at first, but they learned to have it at their own convenience, until it became a fixed habit of their exaggerated ego. Then it is ‘automatic.’ They have it whether it is convenient for their own purposes and comfort or not.

“This was known to Darwin. It interested him greatly. He studied it all the way down to the large, green cabbage worm, which after its “ego” becomes highly exaggerated by its rich diet, has a habit when interfered with, of swelling up and “looking terrible.” It is really harmless, but its photographs, taken and published in various scientific works, show that when it is having one of its stomach-storms, it looks more dangerous than a rattlesnake.

“A great step forward was made when it was found that by locking up people with exaggerated egos and teaching them the soothing rythm of the lockstep in going to and from useful labor, their habit of having brain storms can be relieved. This opens the way for indefinite

progress in spite of the exaggerated ego."—*Post-Dispatch*, March 6, 1907. (The exaggerated ego of insanity is a disease engendered egoism. ED.)

THE PARATERESEOMANIAC might have his mind occupied to exhaustion with seeing new sights of gigantic skyscrapers just now going up in St. Louis, of many styles of architecture and designed for many different uses.

ONE OF THOSE EROTOPATHIC WOMEN, such as are prone to fix upon doctors, divines, lawyers or other men of growing prominence as their legitimate, erotic prey, is responsible for the recent death of a leading, most reputable physician of a nearby city. Going to the doctor for treatment, and these women are always neuropathic as well as psychopathic with neurogenital erethism, she became importunate in requiring the doctor's attention by frequent telephone calls, and needless, until as is usual in such cases, the doctor protested and complained. The matter culminated in what appears to have been a jealous erotopathic engagement announcement by the lady, either under nymphomaniacal delusion or from nymphomaniacal design, to circumvent a possible engagement to another on the part of the erotopathically victimized doctor. The killing of the doctor by the disease dominated woman, and her own suicide at the same time and by the same means resulted. She shot the doctor and herself.

These morbidly erotic women should have female doctors, but they will not accept them when you suggest them, and there are not as yet a sufficient number of capable lady neurologists, who could rightly manage them if they would.

The only possible promise of freedom from annoyance of the male physician from these persisting erotopaths, is a freely opened and cleansed *prima via* and an anesthetized psychogenital tract, much as if treated for epilepsia, putting hyperesthesia and hyperkinesia in abeyance. The female erotopath in the physician's office is an annoying menace to the peace of mind of the medical practitioner as she is also often to priests, clergy and other men.

EVELYN THAW AND HER DRUGGED DRINK?—Mrs. Evelyn Nesbit Thaw, in giving the details of her drugging at the hands of Stanford White, said that within two or three minutes after she had taken the glass of champagne, with the drug in it, she lost all consciousness. Now chloral hydrat in a full dose upon a specially susceptible person may act very briefly. Sitting at the bedside, I have been surprised often at the exceeding rapidity of its sleep-inducing effect in a thirty or twenty-five grain dose given largely diluted. I have seen a patient under such a dose pass into sleep within five minutes of its administration, just as if from a full 3/100, not abortiv-, dose of hyoscine hydrobromate.

A patient's own estimate, however, of the time required to produce sleep is modified by the drug's influence, and would be much like the estimate of time in normal dreams.

THE SPREAD OF THE IMPULSIVE INSANITY IDEA. "Nifty in the Noodle."—An Irish criminal prisoner, fifty-four years old, defending himself before the Court of Criminal Correction, St. Louis, against a charge of petit larceny, and acting as his own attorney and proving that he had a fool for a client, plead that he was "emotionally and impulsively insane, "nifty in the noodle," as he expressed, and "couldn't help the theft." On this ground he asked the lenient judgment of the court, so that his friends might come to his rescue and pay his fine, which he considered ought to be moderate, in view of his over-mastering mental affliction.

Judge Taylor was evidently touched with the "nifty-noodled" prisoner and, in charitable extenuation for his remarkable mental affliction, made the fine five dollars.

"Nifty in the Noodle" is a rather new term to alienists for kleptomaniac psychokinesia, but it meant the same to Mr. Murphy, at least Murphy meant to please and placate his honor, the judge, with this plea, for no criminal lawyer could make plea of insanity couldn't help it, more

resistant for his client than the same pauper criminal, who probably stole like Judge Baldwin's pig-stealing client, in "self-defense," of the gastric necessities of his hungry life.

OPIUM-BROMID TREATMENT OF EPILEPSY.—Kellner has treated 85 epileptics at the Alsterdorf asylum for idiots and epileptics with a special course of opium and bromid, which has resulted, he states, in the cure of 22 of the 54 patients who completed the course. In 13 others the seizures have become very much less frequent and less severe, with intervals of several months and without contractions. Only 6 patients failed to profit by the treatment. He gives for 50 days 0.05 gm. extract of opium three times a day, increasing gradually until the maximum of 0.29 gm. is reached the fiftieth day, the next morning 0.3 gm. is given and the opium discontinued. He then commences with 2 gm. of a mixture of one gm. each of potassium bromid and sodium bromid with half a grain of ammonium bromid, taken in a glass of fresh seltzer water. This dose is taken at noon and again at night from the fifty-first to the fifty-eighth day, gradually increasing it to the maximum of 9 gm. daily, which is continued for months. During the course of opium he gives three times a day a tablespoonful of 1 per cent. solution of hydrochloric acid, and Carlsbad salts at need, with a light and predominantly vegetable diet, and a daily bath at 24 C. (75 F.) for 10 minutes the first day; 23 C. for 9 minutes the second day, and so on to a bath of 17 C. (62 F.) for 3 minutes the eighth day, repeating this without change for a week and then lengthening the bath by one minute until the maximum of 6 minutes is reached by the end of the 50 days of the opium course. The above dosage is for otherwise healthy adults.—*Munchener Medizinische Wochenschrift*.

We give this place to condemn the opium in this method. Bromides and brain support, with autotoxine elimination without opium, will do fully as well in results. Epileptic suppression and cure are different. Time must elapse before you may know as to cure and, in a chronic trouble, such

as epilepsy is, the long continued use of opium is unwise therapeutics.

The success is in the full dosage of the bromide. All the results above may be secured without the opium and better with mercurials alternating with salines, whether Carlsbad or Epsom, etc.

REFUSING EPILEPTICS TABLE SALT in their dietary appears unwise therapeutics, in view of the now plausibly established autotoxine and ptomaine conception of convulsive excitation therefrom, and the well-known antiseptic and antitoxic power of ingested chloride of sodium in minimum quantities.

AN EXTREMELY YOUNG GIRL SUICIDE trying to form a suicide compact with another schoolmate, was discovered in St. Louis, March the fifteenth.

The child was eleven years old, and bought and swallowed a dime's worth of carbolic acid, unlawfully sold to her by a thoughtless and law-defying drug clerk, who knew the law required a written order for minors.

Neurotic instability is quite as apparent here as in some of the recent cases of unwritten law psychopathy,

DR. CLARENCE MARTIN, of St. Louis Mo., has recently acquired the *Medical Mirror* and consolidated it with his own journal, the *Medical Era*. The *Medical Mirror*, the journal of the late lamented and talented Dr. I. N. Love, had a prosperous and successful career, and was one of the best known medical journals in the country. By consolidating it with the *Medical Era* the usefulness of the *Era* will be enlarged. The April issue of the *Medical Era*, the first number of the consolidated journals, and full of interest, is before us.

We wish continued and increased prosperity to the *Medical Era* under the consolidation.

THE TETANIC AND SEPTIC DANGERS OF GELATIN.
A Government Note of Warning. Dr. Harvey W. Wiley, Chief

of the Chemistry Bureau of the Government Agricultural Department testifying to the deterioration of cold storage food-stuffs, says that the Marine Hospital Service found tetanus germs in gelatin; that gelatin is made from the scrapings of hides "that smell to heaven" and that the gelatin factories are exceedingly dirty. He reminds us that our capsules, as well as deserts and candies, are often made from gelly.

While these facts are not specially new, and are rather sensational, and while the treatment of hides with alkalis to prevent decomposition is proper enough, it is well to repeatedly arouse the public to the importance of aseptic food factories, packing houses, and especially, clean-habited and disinfected workmen. Filth and food ought not to be mixed.

THE CHILD'S PHYSIOLOGICAL MAGNA CHARTA—What Robert Rentoul in his latest work terms the "Children's Magna Charta" is the birthright to be born physically and mentally healthy, the birthright to be happy, the birthright to be useful citizens and healthy parents.

To secure these rights, sacred, saving and inalienable, society and the state should suppress the chronic brain disease engendering inebriate, as chief among the victims of the vicious neurone degeneracy or prevent his having progeny doomed to defect and misery. It should sequester the idiot and all congenital mental defectives and stop promoting the propagation, through lawfully authorized marriage of the degenerate, of abortive brains that handicap the creature, the state and society.

Babes and children yet to be
And grow to place among mankind,
Have right to be, by traduction free,
Of taint of blood or taint of mind,
Science rightly enjoins the way
And true charity should obey.

(C. H. Hughes.)

THE PUBLIC CONSCIENCE is now being aroused as to political and combined capitalistic criminality and the wrongs of organized greed. It must be aroused as to the crimes against the human mind and its normal integrity and against the causes, which engender defective and degenerate organisms unfit for the requirements of civilized life. Lives like some of those of the "tenderloin bunch" and tragedies like the White murder and lives like those of Thaw, Guiteau and others who live on the paranoiac border line or in the swim of paranoia with paroxysms of psychlampsia and brain-storms, should be lived amidst judicious lawful surveillance.

THE UNSTABLE PSYCHIC NEURONE, fearful, fatal, though also often only injudicious, whose instability is repeatedly brought to light anew to the Alienist and Neurologist, in the records of the daily press and in the writings of some of the daily press reporters to whom life seems to be only a series of abnormal psychic sensations and explosions, who seem to be troubled with a pathopsychokinesiac calamus scriptorius, has been justly made the subject of judicial strictures from the New York and Chicago courts.

The Yellow Press sensationalists are doing the brains of the people no little harm by the way they dish up and promulgate the news of crime, the doings of criminals and the divorce court proceedings. The vaudeville and lower class of amusement caterers and the libidinous bill boards, are doing enough to promote neuropathic instability and depravity and develop a morbid erotism among the people, without the powerful assistance of an over-sensational Press in facilitating psychic decadence among the people.

It is pleasing however to note that some antidotal influences are at work in the better class of newspapers. In this connection we take pleasure in noting salutary reformatory and vicariously atoning efforts of the Press of St. Louis.

The daily Press should endeavor to be more discreet in its sensational selections and act more on the side of

sound morals and a sound, stable, self-governing psychology, with a view to strengthening rather than unstabling brains of an already (crime, pleasure and excitement) overwrought people. These United States have political duties now and the destiny before them demands and will demand steady brains and strong, as well as aims to answer great demands.

DR. PERRY ON THE PATHOLOGY OF DIABETES at the Portugal Congress gave great and just prominence to the neuropathic element in this disease, a view in advance of former deliverances on this subject which has almost been in a measure the author's life work, a view advanced many years ago by the editor of this journal. The time is fast approaching when neurology will reign paramount in medical thought, as announced when the *Alienist and Neurologist* was founded in 1880. See editorial of initial number and volume.

HYSTERICAL STIGMATA IN COURT.—A curious use of science was made in the St. Louis courts * * to explain what were alleged to be "knuckle marks" made on the person of one woman by a blow from another. It was alleged on expert testimony that they might have been "stigmata" due to the effects of highly wrought imagination. Something over twenty years ago experiments were made in the "Charcot School," in Paris to find the possible effects of the imagination on the body. It was alleged in the reports of such experiments at the time, that a woman of highly nervous temperament was blistered by a wet rag on her back which she was made to believe was a mustard plaster. When these results of science are brought into court in Missouri, Missouri justice is entitled to know full details of every scientific step involved. But an important point in the testimony is the acknowledgment of physicians and scientists of the power of mind to create or modify conditions of the body. This field of research has scarcely been touched as yet, although its vital bearing upon health and upon the cure of disease is admitted. Science, instead of seeking the whole truth, is inclined to sneer at

those who assert the discovery of truth in this field.—*St. Louis Republic*, March 3, 1906.

As the alienist and neurologist expert in this case we have to say that stigmata were described as one of the possible symptoms of hysteria. The defending lawyer made the application to explain to the jury what he claimed as a delusive occurrence unsupported by other than the complainants' testimony.

Physicians have never doubted the minds' influence over the body in disease. Their injunctions to nurses and all who come in contact with the patient is not to impair its influence and resistance by depressing demeanor or speech.

The terms known to neurological medicine such as suggestive therapeutics, psychiatry, etc., are standing confirmations. It is the exclusive use of faith to the ignoring of natural methods and in lieu of experience that general medicine condemns. It regards medication as essential as diet, sunlight, air, sanitary surroundings and mental rest and hope in managing disease.

The rational helps and supports of nature and suggestions of experience are as essential to the cure of disease, as the teachings of experience in eating, clothing, navigation or business management or as keeping a hotel.

The "bless me this is richness" plan of Dickens' "Dotheby's Hall" does not always sustain bodies any better than it cures disease, with all people, though it may work on public credulity for awhile.

The hopeful spirit of Mulberry Sellers is not to be discouraged in ministering to the sick, if the patient possesses it. Cheerful optimism is always an aid to medical ministration, if the patient does not omit his medicine or take too great chances with adverse environment. But as faith is not a good substitute for physic when the bowels need a purge, it is not a good exclusive alternative for other physical states that need medication.

INTERNATIONAL CONGRESS ON PSYCHIATRY, NEUROLOGY AND PSYCHOLOGY to be held at Amsterdam, 2nd-7th, September, 1907, At its meeting held on July

24th, 1903, The Netherlands Psychiatry and Neurology Society unanimously decided to organize an International Congress on Psychiatry, Neurology, Psychology and the Care of the Insane.

The eminent position, which the study of nervous and mental diseases to-day holds in the sphere of Medical science, and the great social interests, bound up in a complete knowledge of all the psychical manifestations of man, render it imperative (in order to afford scope for an interchange of opinions) to have recourse from time to time to a wider and more specialized field than can be found in the narrow confines of sections of a General Medical Congress.

While admitting the great importance of National Societies for the study and development of Psychical and Neurological Science, it is incontestable that International Congresses are unique in their facilities for the complete examination of modern science and for the international collaboration, which is indispensable to the real progress of Science.

In the organization of the projected Congress the traditions of the Congresses at Brussels and Paris have been followed. It is thought, however, that the importance of the Congress will be enhanced by the introduction of a section for Psychology, which by reason of its influence on our conceptions and methods of psychical examination, is entitled to occupy a prominent position at any Congress, dealing with the different manifestations of Psychical Life.

It will be endeavoured as regards the section of The Care of the Insane, to follow in the footsteps of the Congresses at Antwerp and Milan.

We thus earnestly solicit your attendance on our Congress, which will be held in Amsterdam, 2nd-7th, September, 1907. Under the Patronage of Her Most Gracious Majesty the Queen Wilhelmina and of His Royal Highness Prince Hendrik of the Netherlands. Honorary Presidents: H. E. The Minister for Home Affairs, Dr. P. Rink, H. E. The

Minister of Justice, Dr. E. E. van Raalte; Dr. G. van Tienhoven, Commissary of Her Majesty the Queen in the Province of North Holland. Dr. W. F. van Leeuwen, Burgomaster of Amsterdam.

International Propaganda Committee for the U. S. A. are as follows:

New York: Drs. Carlos F. MacDonald, William Mabon, Charles Pilgrim, M. G. Schlapp, W. B. Pritchard, and Louise G. Robinovitch.

Philadelphia: Drs. S. Weir Mitchell, John K. Mitchell, Charles K. Mills and W. G. Spiller.

Providence, R. I.: Dr. G. Alder Blumer.

Boston (Cambridge,) Mass.: Prof. William James.

Madison, Wis.: Prof. Joseph Jastrow.

St. Louis, Mo.: Prof. C. H. Hughes.

Chicago, Ill.: Prof. Hugh Patrick.

Montreal, Canada: Dr. T. Burgess.

CHRISTIAN SCIENCE HAS A RIVAL in remarkable cures in a certain brand of whiskey, testimonials to the virtues of which may be seen in all of the daily papers, of people rescued from the doctors and undertakers by the hundreds, especially in the resussitation of old people rescued from the grave through its virtue and power. Some of them will probably live till they are translated under its inspiring spiritual influence. They will go on getting better, like the man with the fractured and shortened thigh under absent Christian Science treatment, whose leg began to grow and kept on growing till it made the other leg look short, because he lost the name and address of the scientist who started the miracle.

CHOREA CONSIDERED AS A NEUROHUMORAL DISORDER—Read at the Portugal International Congress by Sir Dyce Duckworth, a paper on "Chorea considered as Cerebral Rheumatism," in which he concluded:

1. That chorea (of Sydenham) is now regarded as a disease caused by an infective agency, and not as the

result merely of shock or fright occurring in persons of neurotic instability.

2. That the peccant matter of rheumatism, which is now recognized as of microbic origin, is certainly the most frequent if not the sole cause of the infection.

3. That no other microbic element than this diplococcus has been discovered in those cases of chorea which are believed to be unconnected with rheumatism and independent of rheumatic influence.

4. That the infecting agent appears to be somewhat akin to but distinct from other varieties of streptococcus which induce ordinary forms of pyæmia.

5. That chorea is therefore to be regarded as a form of rheumatism involving the membranes and cartical structure of the brain, and is in fact cerebral rheumatism.

6. That there is a neurotic element in the pathogeny of chorea predisposing subjects thus impressed to this manifestation, amongst others, of rheumatism.

7. That chorea is thus a neuro-humoral disorder."

Whatever be the relation of the diplococcus infection above referred to there is no doubt in our experience of the depressing and exciting cause on influence of psychic shock. Too many well proven instances have come under our personal observation and recovered under neurotic tranquilization and reconstruction treatment without anti-rheumatic treatment to permit us to doubt the prime importance of the element of cortex-instability in the functional display of this disease. ED.

THAW'S INSANOID MORBID EGOISM—We may not say, in the hearing of the court, paranoiac morbid egoism, for though able experts have called Thaw a paranoiac, others have denied the paranoia and the jury of two laymen and one doctor have pronounced him sane. Real paranoiacs seldom, if ever, recover except in outward appearance. We must therefore improvise a new term—paranoiad (like paranoia) as paranoia is so near, so like other forms of insanity and yet so different, so like the *folie raisonnante*, itself so

like sanity, because its victims can reason, that it was for long disputed till the Germans found this latter term for this very similar condition.

Paranoiacs are always ready under stress of strong or slight exciting influences, to display the innate latent psychokinesiac aptitudes and slumbering tendencies to imperative conceptions and fulminations, breaking the monotony of quiescent delusion and abiding morbid mentality, in revealed mental disease when and where not looked for by the non-expert.

The startling psychlampsias of paranoia and paranoid, like the morbid brain-storms of other cerebro-mental diseases, serve to show insanity, as the lightnings in the approaching cloud serve to show that electricity is in the atmosphere.

MINIMUM AND NON-ALCOHOL PRESCRIBING received much proper consideration at the late meeting of the British Medical Association. The medical profession has had its day of intemperance in prescribing the alcoholics, as was there clearly shown in the addresses of Victor Horsley and others.

Intelligent people likewise, appear to have had their day in the intemperate drinking of alcoholics, and the tide of liquor drinking among the well-informed is ebbing. Alcoholics unwisely prescribed are as much a mockery in results as when unwisely imbibed.

THE XVITH INTERNATIONAL MEDICAL CONGRESS at Budapest in 1909.—The XVth International Medical Congress, held in Lisbon, have chosen Budapest, the capital and residence of Hungary, for the site of their next assembly, and the preliminaries are already in process.

His Imperial and Apostolic Royal Majesty the King has graciously taken upon himself the patronage of the ensuing congress. The state and town have each contributed 100,000 crowns to defray the expenses.

The committee for the organization, execution, disburse-

ments and reception, as also for the sections is already formed and the statutes are drawn up.

There are 21 sections, each branch of science having a separate section assigned to it.

The date of the opening is fixed for the 29th August 1909, and the sessions will be continued till the 4th of September.

There is every reason to presume that the congress will be well attended. Hitherto they have shown an attendance of from 3000 to 8000 participants. Judging from the geographical situation of Budapest, at least from 4000 to 5000 participants may safely be reckoned upon.

The managers of course, attach the utmost importance to the scientific activity of the congress, and every effort is being made to win over the most prominent representatives of medical science.

The first circular, which will contain every necessary information as well as the statutes, will be ready for circulation in the course of the year 1907. Meanwhile the Secretary-general of the congress (16th International Medical Congress, Budapest, Hungary, VIII., Esterházy-utca 7), will have much pleasure in giving information to inquirers. Emil Gróz, M. D., Professor to the University; Secretary-general of the Congress. Calman Müller, M. D., Professor to the University, Member of the House of Magnats; President of the Congress.—Budapest, March 1, 1907.

THE CINEMETOGRAPH DEMONSTRATION of various forms of Epilepsy, Athetosis and other nervous diseases by Dr. Chase, of Boston, before the Portugal Congress and the last meeting of the American Medical Association at Toronto is a novel and excellent method of showing symptoms of spasmodic diseases, and a great help in certain clinical lectures, as on epilepsy, for instance, where the subject fails to make a timely demonstration for us.

A RARE NOTE OF THANKFUL OBLIGATION FROM A
RARE ATTORNEY.

DR. C. H. HUGHES,
3872 Washington Blvd.,
City.

Dear Doctor:—

Herewith we hand you our check as agreed, in full payment for your professional service rendered as expert in case of ————, *et al.*

Kindly send us receipt, and permit us here and again to express our appreciation of your patient willingness to enlighten the ignorance of,

Yours truly,

* * *

This sense of obligation to a psychoneurological expert is rare. The diligent inquiry of the attorney before the trial as to the essential facts to be proved in order to establish the nervous disease existing, is exceptional. Usually the medical expert has to thrust his knowledge upon the attorney and insist on a certain line of diligent inquiry in the right line of testimony, and upon the line of questions to ask, and on showing the answers, in order to awaken the lawyer to a full realization as to what to do in order to establish disease. Too many await possible developments on the days of the trial.

PUBLIC RECOGNITION OF MEDICAL MEN comes grudgingly on strictly medical lines. He may bring to light and put back "the pestilence that walketh in darkness and stay the destruction that wasteth at noonday," and his good work is too often overlooked or accepted as a matter of course, as the dishes of a cook are received or the work of any servant.

But when a medical man steps aside into literature and makes a mark, as many do, and more could, it is noted.

Weir Mitchell's fiction has made him more fame with the public than all his valuable facts contributed to neurological science, and so with Oliver Wendell Holmes. He discovered the contagiousness of puerperal fever and con-

tributed thereby to the saving of thousands of human lives, but Autocrat of the Breakfast Table alone gave him far more fame than that. And so we hear of Brunton, Conan Doyle, Hammond and others. Yet as a contemporary of Mitchell, Bartholow, Sequin, Amadon and others, the latter contributed his share to medical discovery and resources in the field of neurology.

If a medical man imprudently ventures into literature, while yet aspiring for patronage in practice, he imperils his professional reputation and there are not wanting those in the ranks of his guild who will uncharitably say "he is a good writer, but not much of a practitioner," as though a competent medical man could not fit himself for forceful thoughtful expression on matters of human concern, as well as wear good clothes and rightly-fitting on his frame.

The medical man who well and rightly sees and thinks and speaks concerning his profession, should neither be blind nor incapable concerning the rest of his environment. The observant, well-educated physician is well informed in the collateral sciences and should be the broadest of anthropologists.

THE BLOOD PRESSURE IN CASES OF PARETIC DEMENTIA.—The preponderance of opinion inclines toward the view that the pressure is low in the later stages of the disease, although the evidence adduced is not altogether conclusive. With the view of determining this point on the basis of personal knowledge, Dr. G. L. Walton (*Journal of the American Medical Association*, October 27, 1906, p. 1341) made an examination of 108 male patients, and he has found that the average blood pressure in cases of paretic dementia is on the whole high, probably as a result of atheroma and its cardiac and renal accompaniments. On the other hand when atheroma, cardiac enlargement and renal disease are absent the average blood pressure appeared to be somewhat lower than that of health, although the variations were so marked that the pressure could not be said to be uniformly low. Accordingly it will be seen that

this test is not likely to prove of great value in the differentiation of paretic dementia from other disorders of the nervous system. The observations tended further to indicate that the excited states of paretic dementia are as likely to be accompanied by high as by low pressure, that mental depression is accompanied by high oftener than by low pressure, although it is not incompatible with a low pressure, and that while the average pressure in the presence of euphoria is perhaps somewhat lower than in the presence of other mental states accompanying paretic dementia, it is not inconsistent with high blood pressure or with pronounced atheroma, with its cardiac and renal accompaniments.—*Editorial, Pennsylvania Medical Journal, January.*

A RIGID AND RIGHT INVESTIGATION of the late terrible collision disaster at Terra Cotta Station, near Washington, D. C., would probably reveal a wearied, not well-acting brain, from too little sleep. Maybe with drink-weariness added, a custom too common to the season with men who have life-caring duties to perform, or loss of sleep and impaired powers of attention from other cause.

Nearly every investigation of every railway accident inquires into the question of sleep. It should be known if the inspector of wheels and brakes and trucks has had the sleep he needed, and if not, why.

On the engineer and the train dispatcher depend such consequences to life that the hand that moves the throttle and sends train-moving or detaining dispatches, should be the highest style of man, with mind capable and alert to the importance and means of keeping at all times a clear, strong head and mind for unerring work, and he should be treated accordingly by himself in all his habits of life and by railway management. Treated right as to tax on their vitality and liberally as to salary for such important service.

16,937 RAILWAY CASUALTIES, 194 directly caused railway deaths in three months in the United States for the quarter ending June 30th, 1906 and 274 deaths for the pre-

ceding quarter, and almost a like number for the following quarter, suggest the need of a rigid official inquiry and remedy, not only into the safety of railway construction and equipment, but into the mental condition of the management and men that make such enormous maiming and death lists possible.

Mental inadequacy and moral obliquity must be largely to blame for such horridly inhumane and fatal railway management. Weak brains, over-wearied and worn brains, wrong thinking and wrong feeling, inhumane brains, with avarice, fiendish dividend-making and greedy charity-killing brains, dollar-saving, life-destroying brains, overworked and overborne brains are too much in evidence in our railway management and service for the good of humanity, especially that part which goes to make up the railway suffering and destroyed American people.

NOW IT IS THE PRESIDENT, the corypheus of the strenuous life, who has reached the result of ceaseless cerebro-psyhic strain and approached so near the verge of grave cerebrasthenia that he is to take a timely rest at Oyster Bay, with a very quiet domestic program arranged for him there, if he can be permitted to carry it out, which would seem scarcely a possibility.

A visit incognito to Alaska or to Iceland, or a long sea voyage beyond the reach of news even by wireless aerogram, would have been and would yet be best. Presidents need brain rest like other mortals and should cultivate, through adequate, quiet retirement and relaxation, that recuperation of psychic neurone stability which gives the mental poise and equanimity and freedom from the neurone irritability of cerebrasthenia so essential to the brain of the chief executive of a people, who kill presidents by overwork demands upon them, as well as by direct assassination.

His excellency may perhaps be now blissfully thinking some of the things Pope said in his farewell to London:

“Dear, D——, distracting town, farewell,
Thy fools no more I’ll tease;
Now in peace let critics dwell
And pitchforks rest at ease.”

A JUST COURT DECISION. HOT WATER IN EAR IS "EXTERNAL " INJURY, RULES THE COURT.—Last March the Kansas City Court of Appeals decided that the chance injection of scalding water into a man's ear was "An accidental, violent and external injury."

John D. Driskell died from the effects of scalding water dripping into his ear from an engine around which he was working in the Missouri Pacific shops in Sedalia.

He held an accident policy in the United States health and accidental insurance company, but that company refused to pay the policy upon the ground that an injury from the dripping of water in the ear was not an external, violent and accidental injury. But the appellate court declares that it is. The case is sent back to Pettis county for trial.

AMERICAN MEDICAL EDITORS' ASSOCIATION.—The 38th Annual meeting of this Association will be held at Atlantic City on Saturday, June 1st, and Monday June 3rd, with Headquarters at the Marlborough-Blenheim Hotel. This active Association now numbers nearly 150 members with many applications in hand for action at the coming meeting. An interesting programme has been prepared. Besides the President's address many valuable papers will be read. It is anticipated that the coming meeting will exceed any prior meeting in point of attendance.

The Annual Editors' Banquet, the social event of the week, will be held at the Marlborough-Blenheim Hotel on Monday evening, June 3rd.

DR. HERMAN A. SANTE married to Mrs. Mary A. Sante ought to prove a healthy union in the salubrious climate of St. Louis. Bon Sante, doctor and Mrs. Sante.

IN MEMORIAM.

DEATH OF THEODORE BUHL.—The great medical manufacturing firm of Parke, Davis & Company, has lost its efficient and most worthy president, and we join in expression of the general regret that Mr. Theodore D. Buhl is no more. His death occurred April 7th of the present year. In his loss the medical profession and business world, as well as his family and friends, lose a good man, genial, personal associate and forceful factor in business and professional circles.

“Ten and a half years ago Theodore D. Buhl cast in his lot with this house. Throughout that period he has given us the benefit of his large experience, his sound judgment, his great power in the commercial world, his granite credit reared on an unwavering honesty. As president of the house he was the perfect type of integrity and fidelity to all the stockholders. His high sense of duty as a trustee pledged to administer the property and guard the interests of others, was ever uppermost in his thoughts. The peculiar responsibilities and hazards of our work—our obligations as purveyors to the medical profession and to suffering humanity, were to him always a solemn appeal. The ultimate triumph of character in business was with him a conviction as deep and strong as instinct. The remote future and the distant prize concerned him more than the present gain.

The strength which he gave this house and all the many enterprises in which he shared, signally exhibits what the world should realize especially at this hour—that rich men of unflinching honesty and sound judgment are of inestimable value to their communities. They are the employers of labor, the authors of new industries, the creators

of new values, the pioneers who open up vast avenues of opportunity for their followers. As they succeed or fail, the comfort, the very bread, of thousands is assured or endangered. We hear much these days of unscrupulous, predaceous wealth, but what of the type of Theodore Buhl—what of the men who consider the trust of their fellow-men the best of their possessions, who have a horror of stock-jobbing methods, who never seek unfair advantage, who never lend their name to a dubious enterprise.

As a director Mr. Buhl was the soul of courtesy, kindness and deference. As an employer he was considerate, thoughtful, mindful of the comfort, interests and claims of his employes. To their grievances he gave always a patient and attentive ear. He encouraged the manly expression of honest opinion, and when it differed from his own his effort was to convince and persuade, not to invoke his authority or impose his will.

On behalf of the stockholders, employes and executives of Parke, Davis & Company we record this testimony to the lasting service rendered us by our lamented President. To the members of the bereaved family we offer our warm and heartfelt sympathy. May strength be theirs to bear their sorrow. May they find much comfort in the memory of a life rich in well-doing and in good repute."

CORRESPONDENCE.

FEINTING, FAINTING BERTHA.—Following is a corrected version of the woman known to the police as Fainting Bertha:

We are advised that the newspaper statements concerning this case are not correct in several important details. The essential facts are as follows: Bertha originally came from Omaha, Nebraska. When quite young she showed a certain moral defect, which made it necessary for her people to send her to an institution for feeble-minded, where she could be kept under close control. She was kept there for sometime but either escaped or was discharged. Soon afterwards, when she was about eighteen, she became acquainted with a man, who, as she claims, taught her stealing and also was instrumental in inducing her to engage in immoral pursuits. Sometime afterwards she was adjudged insane and sent to one of the State Institutions in Iowa. She escaped from that Institution, also from another institution in the same state, to which she was again committed. After that she visited very many large cities in the country, but mostly Chicago, which she seemed to prefer. She was arrested on several occasions and sent to the Joliet prison. From there, because of her excitement and immoral conduct, she was declared insane and sent to the State Hospital at Kankakee, Illinois. She escaped from that institution on two different occasions and was later sent to the Illinois Southern Hospital, from which she also escaped twice. The first time she was captured in the vicinity of the hospital and the second time succeeded in getting as far as Peoria, Illinois. At the request of the Superintendent of the Asylum for Incurable

Insane at Peoria, she was re-committed to that Institution and is there at present.

According to the history, also according to the patient's own statement, the girl was always backward in school and always had shown a very poor emotional control, being practically a creature of impulses. She was diagnosed a case of moral imbecility by Dr. Witte of Iowa. Other physicians agreed with his diagnosis.

As regards the "fainting," which gave her the name of "Fainting Bertha," according to the statement of the patient herself, she was taught the method by a professional thief, but did not practice it so much in the stores, but frequently in the open by "fainting" into the arms of men carrying heavy gold-chains and apparently generally well to do and while they caught her and held her she succeeded in obtaining all articles of value and concealing them in her dress. Aside from this "fainting" method, she is also an expert shoplifter, being very quick in concealing silk and other valuable articles under her clothing.

Her escape from the Northern Illinois Hospital for the Insane was accomplished in the following manner:

In going to a regular entertainment she succeeded in diverting the attention of a new attendant, who had been in the institution only about two days. While talking to her and walking with her she appropriated the attendant's key. A short time after she entered the hall she became decidedly excited and it was necessary to have her taken back to the ward. She quieted down as soon as she was brought back and apparently went to sleep. When the attendants returned to the ward after the entertainment she was gone. There was no fainting about this last affair.—
Hospital Interne.

SELECTIONS.

CLINICAL NEUROLOGY.

NERVOUS PHENOMENA DURING PASSAGE OF CHYME THROUGH PYLORUS.—(Nervöse Erscheinungen beim Uebergang des Mageninhaltes in den Darm.) F. A. Kehrer. Kehrer urges study of the phenomena that occur in some persons as the stomach content is passed along into the duodenum. He thinks that regulation of the diet might prevent the annoying phenomena. He speaks of three phases, the phase of sensation of over-loading of the stomach; the digestive phase, during which the stomach is quiet, and the phase of expulsion of the stomach content. During the phase of expulsion local phenomena occur in the stomach, heart and lungs. They consist in oppression in the epigastrium, oppression or pain in the heart region, especially when lying on the left side, palpitation and suffocation. These symptoms are probably due to direct mechanico-chemical irritation of the ramifications of the vagus, or reflex action from the stomach nerves on the nerves of the heart. The oppression causes nightmare. Any mechanical interference with the respiration, for example, by a blanket covering the face of the sleeper, may cause nightmare. Another group of nervous phenomena at the beginning of the phase of expulsion consists in waking out of the first sleep with bad dreams. Kehrer thinks that the changes in the circulation of the brain from the flow of blood to the digestive organs, causing comparative anemia of the brain, are not so important a factor in these phenomena as generally supposed. More probable, he thinks, is the assumption that some of the chyme

passing into the intestines is absorbed immediately by the mucosa of the small intestine, and is passed by way of the blood to the brain and there induces the above phenomena of irritation. Whether it is the peptones, the fat acids or the bile pouring out into the duodenum, or whether with morbid digestion abnormal products are generated, or whether irritating substances from the food are the cause of the disturbances is a question still undecided.—*Ex. Jour. A. M. A.*

Kehrer concludes with some precautions as to overloading the stomach, at night with tardily digestible food, etc. Much depends in these cases upon the erethism of the nervous system including the brain, for a full meal and particular foods that disturb at one time do not do so at another in the same person. A full dose, say sixty grains of bromide of sodium and two fluid drachms each of ess. pepsine and essence pancreas, will, immediately after or during the meal, abort these unpleasant symptoms.—*Ed.*

THE PATHOGENESIS OF FACIAL HEMIATROPHY.—A. Gordon reports a case occurring in a negro male, aged forty-two years. He cannot believe in the exclusivism of the sympathetic origin of the malady, as his own case seems to controvert such a theory. According to some observers a primary atrophy of the subcutaneous cellular tissue is the essential feature of the condition. Others believe that it is of a nervous origin and may follow affections of either the sympathetic, trigeminus, or facial nerves. The majority of cases reported point to an involvement of the inferior sympathetic ganglion. Concomitant pulmonary lesions are found at the apex in many of these cases. This is accounted for by the relations between this ganglion and the pleura at its apex. The author's case presented not only a trophic disturbance of the facial muscles, but also sensory disturbances over the area covering these muscles. That the lower cervical ganglion did not play a role in the causation of the disease in this case was evident from the fact that there were no pupillary changes nor vasomotor disturbances on the affected side. It is possible that the sympathetic fibers found in the fifth nerve may

play a certain role in the disturbance of nutrition of the facial muscles, but association of sensory disturbances and the neuralgic pain in the same area immediately preceding the beginning of atrophy present a strong presumption in favor of the trigeminal pathogenesis of the affection. As to the question of facial nerve it cannot be admitted in this case, as there was no genuine palsy of the affected muscles. The patient had preserved the ability of contracting them, but the degree of contraction was, of course, smaller by reason of the atrophy. The sensory disturbances also were against this view. The author concludes that hemiatrophy of the face may be caused by the lower sympathetic ganglion with its nerve, by the fifth nerve, by the Gasserian ganglion, finally by a central lesion. The tendency of some writers to attribute Romberg's trophoneurosis exclusively to the sympathetic nerve fibers is erroneous.—*New York Medical Journal.*

THE INSANITY OF INEBRIETY.—According to T. D. Crothers the term inebriety describes a pathological condition demanding alcohol for its anesthetic effect and refers to some depressed state or psychic condition which consciously or unconsciously calls for relief which alcohol gives with satisfaction. Alcohol is not the cause, but merely a symptom. Hence the condition must be one of disease and organized degeneration. The author then goes on to describe various types of this form of insanity and the proper methods which should be followed in controlling it. He notes that to all ordinary observation a periodical drinker resembles the insane in conduct and reasoning. Such persons use spirits to extreme toxic states for a brief period, then rigorously abstain for awhile and then relapse. This resembles acute mania in the dominance of the drink impulse overwhelming the mind and body for a period, then subsiding. It also resembles epilepsy in its sudden convulsive onset, and inability to reason and control up to a certain point. Often the periodical drinker is unconscious of the import and meaning of these symptoms. He will suffer from insomnia, headaches, great irritability, intense

nervous anxiety, and dread of loss. He will consult physicians, believing he has serious organic diseases, go off on vacations, make changes in his surroundings and business relations, then all unexpectedly, will drink to great excess, when all these symptoms will disappear. In most cases there are distinct premonitions of the drink storm in conduct, reasoning, and appearance, which the friends recognize, but the victim does not. A large class of the periodical drinkers seem to have some consciousness of the coming attack, and use means to avert it. They often go to hospitals and sanatoria, particularly where they have had some experience before, appearing in a state of great fear and excitement, which quickly disappears. The storm is averted for the time being, and such cases are always very hopeful. In many persons of this class of periodical drinkers, the premonitory symptoms take on the form of reasoning manias. Thus they make elaborate preparations in business affairs, providing for their absence during drink attacks. Many of these persons are active in social and religious work, but a period of unusual fervor is often a precursor of a drink storm. Some show great exaltation of mental activity; others take on a different personality while drinking. With some certain atmospheric and electric conditions bring on an attack. In all there is an unstable highly sensitive brain and nerve organization with a tendency to exhaustion on the slightest occasions. A clinical history shows that heredity is a very large factor in this instability and feeble pain resistance, it also shows that injuries, irregularities of living, defective nutrition, sleep, and excessive strains and drains with other causes predispose to a convulsive condition of nerve energy and depression, for which spirits is a grateful narcotic.

JUVENILE ALBUMINURIA.—Ullmann (Ber. Klin. Nach.) examined the urine of 42 school children a number of times and found albumin in a third of the cases, although the children were all healthy. Only one had passed through scarlet fever; 9 had had measles, and one recurring tonsillitis. In 3 instances the parents stated that the children

had never had an acute infectious disease. On the other hand, a considerable proportion of the children free from albuminuria had a history of scarlet fever or measles in the past. The amount of albumin ranged from traces to 10 per thousand—this largest proportion being found in the urine of a girl in apparently robust health. He remarks that this juvenile physiologic albuminuria usually vanishes without treatment or persists whatever treatment may be instituted. It does not seem to have any effect on the general health or life expectancy.—*Cum. Med. Lit. J. A. M. A.*

NEUROOPHTHALMY.

THE TENOTOMOMANIAC who operates on the eye-museles for Morton's Toe, Rheumatoid arthritis, phlebitis, choroiditis, for all reflex ocular neuroses, for all diseases, for anything you please, is a remarkable product of our time and conditions. For snipping a tendon (or the conjunctiva) he secures several hundred dollars, and for doing it on the same patient a score or more times he charges several thousand dollars. He operates on every patient that enters his office, and no one knows whether the operation is on the tendon or upon the conjunctiva only. One thing is certain:—a tremendous effect is made upon the patient, his friends, and upon pocket-books. Usually one operation suffices to scare the eye or the patient into non-complaint or silence. If the subsequent result is good it comes through the correction of the ametropia by means of glasses prescribed soon after the operation. First the fee; second, the operation; third, refract; fourth, credit the cure to the operation. From a careful physician in a distant state I have just received the following letter:

“Dr.— — — in this town, a specialist in eye diseases, a pleasant man personally, but curiously constituted mentally, so far as his fellow practitioner is concerned, has for some years made, as people call it, a specialty of the eye-

muscles, and, when he finds imbalances, which he *finds in a great many cases*, he sends them to Dr.— — — — for operation. He claims that Dr.— — — — is poor and has never made over ten thousand a year. He has gone farther than that and got another tenotomist into this state as a licensed practitioner and that man comes here every summer and operates indiscriminately on cases Dr.— — — — has reserved for him during the winter. This past summer he has been here and, as I hear, performed some 70 operations, most of them without much benefit. Now what shall be done about this charlatanism? How can it be stopped? I hear that this man does not pretend to test the refraction at all, UNTIL he has done the operation for the fee. I now have in my office an instance which passes comprehension had I not seen it. A woman of 55 had retinitis with choroiditis and small retinal hemorrhages resulting in metamorphosia; O. D. light perception only; O. S. H. with Ast. He fitted her to lens O. S. getting 0. 7 V.; O. D. did his best getting 0. 2, and then claiming that she had exophoria he operated on both eyes twice with no benefit to the exophoria, nor, of course, improvement to vision of O. D. with its hemorrhages and chorioretinitis. Now why on earth any decent man would operate on muscles to cure or relieve intense photophobia resulting from chorioretinitis, passes my ideas of medical honesty. The condition is due to cardiac disease or an old traumatism of the skull. This is indeed muscle-snipping with a vengeance, is it not?"

In the same mail I receive a letter from a critic who urges that the profession must be united against ophthalmic quacks outside of the profession. I answer that this is a most desirable thing, and that I have urged it every year, in season and out of season, for all the years of my life as an oculist. But I add the query: What about the quacks within the profession, shall they be asked to join in the crusade against those outside? Our own little Augean Stable is pretty mirey. Do we care less for the mire than we do for getting the professional stabling? Good medicine as well as cunning astuteness would appear to counsel the cleaning of the professional stables. The scientific blunder

which explains the vogue of the tenotomomaniac is the nonrecognition of the truth that heterophoria is primarily and almost always the result of uncorrected and malcorrected ametropia. Prevent the eyestrain and the heterophoria is prevented. Neutralize the eyestrain of ametropia and tenotomy is unnecessary. Surgicalizing the effect does not cure the cause. The addition of quackery to the surgery scarcely lessens the evil-doing.—*From Types of Ophthalmic Charlatanism*, by Geo. W. Gould, Dec. No. *Cleveland Med. Jour.*

NEUROSEMEIOPATHY.

ABORTION AS A CAUSE OF TETANUS.—Tetanus and other nervous disorders may follow abortion. The following instances are recorded in lately arrived medical dictionary:

“Case of tetanus following abortion at the fourth month. Brownlee (*New England Med. Monthly*, Nov. '91).

“Case of Hemiplegia following abortion. The cervix had been dilated with tampons to remove an adherent portion of the placenta. Fenwick (*American Jour. of Obst.*, Apr., '91).

“Case in which, twelve days after a supposed artificially produced abortion, a 30-year-woman suffered from trismus and tetanus, the convulsions being severe and frequent. Successful treatment by means of antitoxin. Ch. F. Withington (*Boston Med. and Surg. Jour.*, vol. cxxxiv, No. 3, '96).”

NEUROTHERAPY.

FURTHER EXPERIENCE WITH OPSONINS.—Reports are now beginning to come in from various observers relative to the matter of opsonins and the positive value of the new theory. In the *Lancet* of January 5 is a report of a recent meeting of the Manchester Pathological Society, at which Professor A. H. White of Dublin related the results of his experiences of inoculation on the lines laid down by Wright,

and explained the necessity of repeated blood examinations in order (a) to regulate the size of the dose and thus to eliminate the negative phase effect as far as possible; and (b) to determine the length of time its effects lasted. He detailed the effects of surgical procedure on the opsonic index and showed how clinical improvement following a surgical operation where only a part of the disease was removed was coincident with a rise of opsonic index, and that relapse with involvement of a fresh area resulted when a fall in the index occurred. Moreover, he showed that such cases might be completely cured by inoculation, as soon as the opsonic index fell, of suitable and properly interspaced doses of tuberculin. In the course of the discussion, Dr. Loveday showed that an attempt to find a small dose of tuberculin which could be used empirically in all cases failed. Different doses of T. R. had very different actions in the same person. A very small dose might give a curve of opsonic indices very similar to that obtained by too large a dose. In some cases it was really too large and still smaller doses were required, while in others a larger dose gave satisfactory results. There was an optimum dose for each patient only to be determined by frequent observations of the opsonic index. The question was still further discussed by Dr. Ramsbolton, who spoke of the therapeutic use of inoculations of staphylococcus vaccine in certain common affections, and emphasized their value in cases of furunculosis and the severer forms of acne, when the pustular eruption was plentiful and the individual pustules were large, in contrast to the milder cases of acne consisting of a "few spots on the face" which did not seem to yield so readily to this treatment. In quoting the actual cases treated stress was laid on the fact that the opsonic index, before treatment, in the cases of furunculosis and the severer forms of acne, was below normal, whereas in the milder forms of the latter affection the index was about, or just above, normal.—*Ed. Med. Rec.*, Jan. 26, 1907.

DIONIN.—In *Merck's Archives* for October, (from *Ophthalmic Record*), G. C. Savage observes that since

dionin is neither a mydriatic nor a myotic, it has been hard to understand how it can help atropin to dilate the pupil in iritis, and also aid eserin in contracting the pupil in glaucoma. Recent observations on cases of iritis in which there was not only complete adhesion of the pupillary margin to the lens capsule, but the pupillary opening was also filled with plasma, and a solution of dionin was used five minutes after the instillation of the atropin, showed the plasma disappearing from day to day and at the end of one week it had entirely disappeared. The pupil dilated slowly, but in all there was practically complete dilatation. The disappearance of the plasma that could be seen was proof that the unseen plasma binding the iris to the capsule had also disappeared,—that it had been dissolved and carried out of the eye by way of the lymph channels. There is no room for doubting that dionin did this work. It is reasonable to conclude that dionin helps to dilate the pupil in iritis by its solvent effect on the plasma that would cause and maintain adhesions, and that it hurries out of the eye the dissolved plasma by opening the lymph channels. The relief of pain is another very desirable effect to the credit of dionin. In the treatment of iritis this drug is invaluable when used, of course, in conjunction with atropin. How dionin aids eserin in contracting the pupil in glaucoma and how some contraction might be effected by dionin alone, would not seem hard to understand. By opening the lymph channels, thus encouraging the outflow of the watery contents of the globe, it lessens intraocular pressure, this allowing a freer flow of nerve stimulation to the sphincter muscle of the iris.

THE TREATMENT OF NOISES IN THE EAR UPON A DIET FREE FROM SALT.—Lermoyez records (*Ann. d. mal. de l'oreille, du larynx, etc.*, Paris, 1906, November) the case of a man, æt. 76, who had suffered for eight months from noises in his left ear resembling the crackling of parchment. They were intermittent in character, but they became almost unbearable. Sometimes at their onset they caused vertigo, so that the patient was obliged to support

himself. The noises could not be heard by the examiner, even with the auscultating tube. There was no evidence that either the tensor tympani or stapedius muscle was concerned in the production of the tinnitus. The hearing was defective, and low tones were rather better perceived in the left ear, in which were the noises, than in the right, which was free from them.

The difficulty was in determining the cause of the tinnitus, and, under the impression that it arose from extra-aural influences, no local treatment was applied, but the patient was instructed to modify his diet and improve his hygiene. As the result of adopting a salt-free diet, an excellent result was obtained: the tinnitus became less marked, and finally disappeared. Pierre Bonnier, who some years ago studied the influence of Bright's disease upon the ear, published an observation, which apparently did not receive much attention. In the case of a young girl who suffered from spasmodic contractions of the tensor tympani, the exhibition of a milk diet caused the total disappearance of her ear symptoms. He attributed this tonic contraction as due to some degree of renal insufficiency. In Lermoyez's case, albumin was found in the urine. He did not put his patient upon a purely milk diet, but contented himself with eliminating the chlorides. This restriction, as already indicated, proved most successful.

This question of diet has already been the subject of more than one communication in connection with affections of the ear, nose and throat. Thus Jaquet (*Ann. d. mal. de l'oreille, du larynx, etc.*, Paris, 1904,) drew attention to the remarkable effect of a salt-free diet in the treatment of chronic obstructive nasal catarrh. It proved of more value in patients suffering from Bright's disease than did any local treatment. At a more recent date, Chauveau (*Arch. Internat. Laryngol., Rhinol., u. Otol.*, 1905,) has been able to modify a chronic pharyngitis by similar means, and attempted to improve the dry form of pharyngitis by increasing the chlorides in the diet. The whole subject seems worthy of further attention.—*Edinburgh Medical Journal*.

ALCOHOL IN DIABETES is advocated by American Medicine on the ground that there is reason to believe that the first step in sugar metabolism by the cells is to convert it into alcohol. During the period then that the sugar and starches are withheld it is believed to be well to deliver alcohol to the cells in minute doses and frequently, in order that the body may, by being built up, secure control of sugar metabolism. Small doses frequently repeated and well diluted appear to give excellent results.—*Medical Fortnightly*.

DR. HAWKINS, of the *Denver Medical Times*, makes the following interesting observation on Quinine, excepting only the commendation of grain doses, which are excessive in any but the extremely depressed stages of the pernicious forms of plasmodial imprisonment when absorption is slow and the entire alimentary tract may be loaded with the salt without harm:

"Quinin is a general protoplasm poison, having a destructive predilection for protozoa, particularly the plasmodium of malaria, which is destroyed by this alkaloid in as weak a dilution as 1:20,000. It is therefore a specific against malaria and is best given in a gram dose four or five hours before the expected chill, that is, during the ameboid stage of sporulation. Quinin is excreted, mostly unchanged, in the urine, appearing here within a half hour, and disappearing mainly within 48 hours. Small doses (1 to 3 grains) raise blood pressure and strengthen the heart beat; large doses (1 or two grams) have an opposite effect. The leucocytes are lessened in number, diapedesis prevented, red blood cells relatively increased, and urea and uric acid diminished. The effects of excessive dosage (cinchonism), including tinnitus aurium, deafness, headache, epistaxis and blindness, appear to depend chiefly on cerebral congestion and are controllable with bromids. Erythema is often noted in idiosyncratic cases. Quinine is contraindicated in acute diseases of brain and ear.

"Many members of the laity take quinin as a 'tonic'—often with a dash of whisky—whenever they have 'caught

cold' or are otherwise depressed. The custom is not a bad one, providing only small doses (say 2 grains t. i. d.) are used for a few days. Laxitives and restricted diet, however, are more essential. The treatment of lobar pneumonia with large doses of quinine, followed by Juergensen thirty years ago and recently revived by Galbraith and others, is but another illustration of the cyclic nature or fads. It proves, if nothing else, that the average patient of sound constitution and between the extremes of life, will recover from pneumonia despite a 'whole lot of dosing.' Quinin is serviceable in most conditions of vasomotor instability, chills, for example."

Hawkins conducts one of the best journals of the Rocky Mountain region and is so thoroughly accurate in his editorial statements that we have never before differed from him and even in this the difference there is probably in sacrificing qualification to terseness of statement.

HAEMONEUROTHERAPY.

OPSONIC THERAPY.—Charles D. Aaron, M. D., of Detroit, has contributed to the *New York Medical Journal* a valuable account of the work of Sir A. E. Wright, together with that of Stewart R. Douglass and J. Freeman, in the pathological laboratory of St. Mary's Hospital in raising the antibacterial power of the blood over invading microbes.

According to the revised views which Wright now holds, and which came step by step through his use of various bacterial substances in the form of vaccines, opsonin is an ingredient of the blood serum which aids phagocytosis by its inhibiting action on a given micro-organism. That is to say, it acts on the microbe and prepares it to be ingested by the protective body cells or phagocytes, chief among which are the polynuclear leucocytes of the circulating blood. The blood serum of man contains opsonins for various pathogenic bacteria, and in a state of health this opsonic content, or "opsonic index" as it is called, is at a certain or normal level. By an ingen-

ious method which Wright and Douglass have devised the opsonic index for any particular pathogenic microbe can be determined. This method consists essentially in mixing with fresh human leucocytes, the serum to be tested, and an emulsion of the particular bacterium under investigation. After a short incubation this mixture is spread as in making a blood film, stained appropriately, and then examined with suitable microscopic power. The phagocytic leucocytes will now be revealed containing the bacteria in their substance, and by counting the contained bacteria in a sufficient number of leucocytes, striking an average, and comparing it with a normal serum, the opsonic index for that particular serum and that particular microbe is obtained. In actual practice the determination of the opsonic index can be satisfactorily executed only by a properly equipped laboratory expert sufficiently experienced in bacteriology and serum pathology, and the same consideration applies to the production of the various vaccines, and further, of course, to such steps as the isolation and identification of a given infecting microorganism and the preparation of a vaccine from it.

Now, the opsonic power, or, in other words, the opsonic index fluctuates, rises and falls. During infection by a certain bacterial species the opsonic index for this particular species' is usually below normal, or to use one of Wright's phrases, the individual serum is in a "negative phase" of opsonic power. Thus in chronic staphylococcus disease, as, for example, acne vulgaris, or furunculosis, the staphylo-opsonic index is depressed, and in pulmonary tuberculosis or osseous tuberculosis or glandular tuberculosis the tuberculo-opsonic index is low. By its natural recuperative power, that is, by its spontaneous active immunity, the infected individual may generate opsonins of sufficiently increased potency to overcome the invading bacteria and to permit the phagocytes to destroy them, when natural recovery ensues. Similarly, by hygienic or therapeutical measures this opsonic activity of the blood serum may be increased. But the chief merit of Wright's work lies in the fact that he succeeds, by the use of his

bacterial vaccines, properly dosed and properly spaced, in artificially stimulating the flagging opsonic power of the infected individual's blood and of arousing it to a point, at which healing processes begin and progress to recovery. As prepared at the present time these vaccines are suspensions in sterile normal salt solution of pure cultures of various bacteria grown on the surface of agar only to the height of vegetative activity, and killed by heating for thirty to sixty minutes at 60° C. To guard against subsequent contamination lysol is added to the finished emulsion. Dosage is determined by administering an ascertained number of the bacteria, and for counting bacteria in a vaccine emulsion Wright has devised a very ingenious method. An exception to the vaccines prepared as just described is that against tuberculosis, for which Koch's new tuberculin in very minute doses is used.

To illustrate the practical working of Wright's opsonic therapy let us take as an example a case of chronic staphylococcus infection, say one of long standing furunculosis, which fails to yield to any of the usual hygienic or medicinal measures. An examination reveals a low opsonic index for staphylococcus, that is to say, the patient's serum does not excite a phagocytosis of staphylococci to the same extent as that of a healthy individual; or expressing the condition in other phraseology, the patient is in a negative phase of resistance to staphylococci. A vaccine is prepared from *Staphylococcus aureus*, either of extraneous origin, or better still, that obtained from the victims own furuncles. A subcutaneous injection of about 200 million of these staphylococci is administered. Now, if repeated observations of the opsonic index are made it will be found that the immediate consequence of the inoculation usually is a further depression of the opsonic index, that is, a negative phase ensues. After this brief fall and generally within the first three days, the opsonic index rises, reaching the normal level and often exceeding it; this is Wright's "positive phase" of immunity, and it lasts for several days, for longer periods, or even indefinitely, though it gradually recedes after attaining a maximum

point. It is very essential in the event that two or more injections of vaccine are required to treat a given case, to introduce these additional doses when the opsonic index is tending downward, or during the negative phase which follows the primary increase of opsonic power. This means that the dose of vaccine should only be repeated after the stimulating effects of the previous inoculation are passing off. Coincidentally with the negative phase of the inoculation the patient usually feels indisposed, and the boils may appear aggravated, but with the inauguration of the positive phase a feeling of general well being and a pronounced improvement of the furuncles is noted. Proper doses of correctly prepared vaccines are absolutely devoid of danger, and should excite no marked local re-action nor disagreeable constitutional disturbance.

NEUROSURGERY.

SOME MENTAL SYMPTOMS DUE TO DISEASE OF NASAL ACCESSORY SINUSES.—J. A. Stucky, November 24, 1906, shows by the reports of various cases that acute or chronic diseases of the nasal accessory sinuses often gives rise to serious forms of mental disturbance. The cases which he has especially observed gave every evidence of chronicity. All gave the prominent characteristic symptoms of suppuration. All were operated upon after the Killian method of entering the frontal sinus, removing the floor of the sinus, or enlarging the infundibulum, as well as removing the middle turbinate and the anterior ethmoid cells, and as many of the posterior cells as could be found which gave evidence of suppuration. In these cases the ethmoid cells were extensively involved. The mental symptoms were very marked. Insomnia, mental depression, indifference to conditions or surroundings, morbid suspicions, morbid fears and suicidal inclination are among the symptoms described. As to their cause, toxin-producing bacteria in the gastro-intestinal tract, combined with the sepsis from pus absorption, the influence of which acts upon the cortical cells and nerve fibers of the brain, are probably the chief agents causing the mental disturbance.—*Medical Record.*

REVIEWS, BOOK NOTICES, REPRINTS, ETC.

THE PROGRAM OF THE FOURTH ANNUAL MEETING OF THE PHILIPPINE ISLANDS MEDICAL ASSOCIATION, held at Manilla, February 27th, 28th, and March 1st, 2nd, shows medical interest in organization and progress.

A Social Meeting and Smoker at the University Club, had for Guest of Honor: The Governor General and the Members of the Philippine Commission; Major General Leonard Wood; The Chief Surgeon, Division of the Philippines; The Fleet Surgeon, U. S. Asiatic Squadron; The Director of Health and Chief Quarantine Officer U. S. P. H. & M. H. Service; The Director of the Bureau of Science; All Foreign Delegates and Invited Guests and The Reverend S. B. Rossiter, D. D.

The regular membership is about sixty. The papers and addresses were: Mosquitoes in the Philippines, their Breeding and Habits, with Methods for their Suppression (Illustrated); A Picture-talk on Russian Sanitary Ways and Means in Manchuria, 1905; Hydrophobia in the Philippine Islands; Clinical Observations on Uncinariasis; *Necator Americanus* in Natives of the Philippine Islands; The Physiologically Active Constituents of Some Philippine Medicinal Plants, Arrow Poisons and Fish Poisons; Native Medicinal Plants; The Transmission of Leprosy to Apes; The Fate of the Agglutinins upon Filtering an Immune Serum; The Filtration of Antiserums; Address, Dr. W. V. M. Koch, Medical Officer in Charge Infectious Diseases Hospitals, Hongkong; Leprosy in the Philippine Islands and the Present Methods of Combating the Disease; The Habitual Use of Opium as a Factor in the Production of Disease Among Chinese; Quantitative Investigations of the Phenomena of Agglutination (Agglutinin and Agglutinoid); Observations on the Etiology of Dengue Fever, (a) Appen-

dicostomy, (b) Additional Report on Result of X-Ray Treatment of Hemato-Chyluria due to *Filaria Sanguinis Hominis*; Infant Feeding in the Tropics; Address; The Recent Trend of Immunity Research; A Summary of Some Experimental Work in Plague Immunity and addressed by distinguished representatives of Chinese, Japanese, Russian and U. S. Army medical interests. The program is well executed typographically.

THE OPEN AIR TREATMENT IN PSYCHIATRY, by William Mabon, M. D., New York. Reprinted from the New York Medical Journal, for February 9th, 1907.

This is an interesting, valuable and timely contribution to an important matter concerning the welfare of the insane. It belongs to the therapy of non-restraint, which, conducted by an Alienist of right clinical experience and discriminative judgment such as Dr. Mabon, it ought always to be beneficial to rightly selected patients.

NEUROGRAPHS, A SERIES OF NEUROLOGICAL STUDIES CASES AND NOTES. Editor, William Browning, Ph.B., M. D.; Associates, R. M. Elliott, M. D., E. G. Zabriskie, M. D., F. C. Eastman, A. B., M. D. and F. Tilney, A. B., M. D., Vol. 1, No. 1, March 20, 1907. Germany: Th. Stauffer, Universität-Strasse 26, Leipsic Brooklyn-New York, Albert T. Huntington, 1907.

The copy before us contains: A Case of Brain Abscess; Localization; Operation; Recovery, by J. E. Sheppard, M. D.; Cephalic Tetanus in America, by F. C. Eastman, M. D.; A Case of Myasthenia Gravis Pseudoparalytica with Adenoma of the Pituitary Body, by F. Tilney, M. D.; Some Remarks on the Facial Nucleus, by E. G. Zabriskie, M. D.; Clinical Studies of the Pressure Effects of Some Cardio-Vascular Agents. Part 1. Observations on the Hypodermatic Use (Single Injections) of Aconitine; Gelseminine and Water, by F. Tilney, M. D., and R. O. Brockway, M. D.; A Family Form of Progressive Muscular Atrophy (Myelogenic Type) Beginning Late in Life, by W.

Browning, M. D.; Note on the Administration of Arsenic and An Illustration of Spondylolisthesis.

THE N. Y. STATE COMMISSION IN LUNACY, for 1905, Wm. Mabon, M. D., Prest., makes an interesting and valuable showing on the subject with an analysis of cases and deductions profitable to Alienists.

The analysis of cases discussed under headings of dementia precox, paranoiac conditions, depressive hallucinosis, anxiety psychoses, mania—depressive insanity, psychoesthenic disorders, hysterical psychoses, epileptic psychoses, etc., notes of conference of State Superintendents and Dr. Russell's paper, etc., are good material for psychiatric thought.

W. B. SAUNDERS COMPANY, Philadelphia and London, have just issued a revision of their handsome illustrated catalogue of medical, surgical and scientific publications. This is a most elaborate and useful catalogue. The descriptions of the books are full, the specimen illustrations are accurately representative of the context of books, and the mechanical makeup is in keeping with the high order of the context. The authors are all men of recognized eminence in each branch and specialty of medical science. A copy of this catalogue will be sent free on request.

TEXT-BOOK OF PSYCHIATRY.—A PSYCHOLOGICAL STUDY OF INSANITY FOR PRACTITIONERS AND STUDENTS.

By Dr. E. Mendel, A. O. Professor in the University of Berlin. Authorized Translation. Edited and enlarged by William C. Krauss, M. D., Buffalo, N. Y. President Board of Managers Buffalo State Hospital for Insane; Medical Superintendent Providence Retreat for Insane; Neurologist to Buffalo General, Erie County, German, Emergency Hospitals, etc.; Member of the American Neurological Association. 311 Pages. Crown Octavo. Extra Cloth. \$2.00 net. F. A. Davis Company, Publishers, 1914-16 Cherry Street, Philadelphia, Pa. Knowing the author's merit we heartily commend this book.

PATONS' PSYCHIATRY is a useful and exceedingly valuable book to all students of the subject, from a masterful source of right clinical experience. Its author has obeyed the injunction of the great Esquirol by living with the insane to learn of them in the right clinical way and has in consequence produced a book more practical than speculative, full of the lessons of experience. The author's precepts for the examination of patients are excellent. Some of them might well have been added to the examination of the Thaw case.

THE SUBCONSCIOUS by Jastrow would likewise help the Thaw commission. There are features of the subconscious life of H. K. Thaw that require critical consideration on the part of those whose duty it is now to know of a truth the exact state of this man's mind.

RHYTHMOTHERAPY.—A discussion of the Physiologic Basis and a Therapeutic Potency of Mechano-Vital Vibration, to which is added a Dictionary of Diseases with Suggestions as to the Technic or Vibratory Therapeutics. By Samuel S. Wallian, A. M., M. D., President American Medico-Pharmaceutical League. Illustrated. Pp. 210. Chicago: The Ouellette Press. 1906.

"This volume attempts to place on a scientific basis the much vaunted recent treatment of various ills by vibration. It is doubtful whether all can be accomplished which is claimed, but exaggeration is to be expected in the exploiting of any single method of treatment. No doubt vibration has its uses, but they are somewhat sharply circumscribed as our increasing experience serves to demonstrate. The list of diseases, according to the writer, treatable by means of vibration is long and unreasonable. It is, for example, a waste of time to discuss the treatment of dementia or of diabetes mellitus or of epilepsy by this means."

We cordially concur in the above estimate of this book which we extract from the review department of the *Boston*

Medical and Surgical Journal. Rhythmotherapy and vibriotherapy have their uses in torpid atrophic states, where a course of judicious therapy has preceded and accompanies and the possibilities of normal neurotic reconstructive response exist in the organism to the form of excitation, yet, unwisely or untimely employed the result may be harmful. There are cases where the psychic and physical impression may be salutary, but seldom as an exclusive method of treatment. The wiser and more widely experienced the physician the better the possible results.

WELLCOME'S PHOTOGRAPHIC EXPOSURE RECORD is a vest pocket edition of value to photographers in making negatives, insuring certainty and uniformity of result. The chief features, Exposure Calendar and Calculations, Tabloid Developers and Development by the time method. Price, cloth 50c. Burroughs, Wellcome & Co., New York, N. Y.

Vaginal Tampons: Some Points of Practical Interest. By Charles T. Souther, M. D., Cincinnati.

American Civic Association. Department of City Making. Public Comfort Stations. By Frederick L. Ford, Hartford, Conn.

Ectopic Gestation; with Report of Cases. By O. B. Campbell, A. M., M. D., St. Joseph, Mo.

Some Remarks on Prostatic Hypertrophy. By Charles H. Chetwood, M. D., Professor Genito-urinary Surgery, New York Polyclinic Medical School and Hospital; Consulting Surgeon, St. John's Hospital.

Electricity in the Treatment of Disease. By John V. Shoemaker, M. D., LL. D., Philadelphia.

An Interesting Case of Pernicious Anæmia. By John V. Shoemaker, M. D., LL. D., Philadelphia.

The Scientific Foundation of Modern Treatment of Disease. By John V. Shoemaker, M. D., LL. D., Philadelphia.

The Open Air Treatment in Psychiatry. By William Mabon, M. D., New York.

The Removal of Overhead Wires. By Frederick L. Ford, Hartford, Conn.

Treatment of Croupous Pneumonia in Children. By Joseph E. Winters, M. D., New York.

Some Practical Hints Regarding Medical Postgraduate Study in Berlin. By James N. Vander Veer, M. D., Albany, New York.

A Case of Heteroplastic Ovarian Grafting, Followed by Pregnancy, and the Delivery of a Living Child. By Robert T. Morris, M. D., New York.

Clinical Physiopathology. The Need of a New Classification of Diseases of the Nervous System. By L. Harrison Mettler, A. M., M. D., Chicago.

Report of Cases of Uterine Fibroids Associated with Gallstones. By Albert Vander Veer, M. D., Albany, N. Y.

Paresis: A Research Contribution to its Bacteriology. By F. W. Langdon, M. D., Cincinnati.

Surgery of the Stomach, with Report of Cases: One Case of Gastrostomy. Two Cases of Gastrectomy. By Albert Vander Veer, M. D., Albany, N. Y.

Report of Cases Treated by a Modified Bier-Klapp Method of Hyperemia. By James N. Vander Veer, M. D., Albany, New York.

Sarcoma of the Nose, with a Consideration of the Spontaneous Disappearance of Malignant Growths. By Robert Levy, M. D., Denver, Col.

The Cure of Psoriasis, with a Study of 500 Cases of the Disease, Observed in Private Practice. By L. Duncan Bulkley, A. M., M. D., New York City.

Surgical Treatment of Tuberculosis of the Upper Air Passages and the Ear. By Robert Levy, M. D., Denver, Col.

Prostatectomy in Two Stages; A Conservative Operation with Minimum Hazard. By Charles H. Chetwood, M. D., of New York.

In Refutation of Statements made by the Editor of the *Bulletin of the American Pharmaceutical Association*, as published in the issue for November, 1906, and republished in the *Journal of the American Medical Association*.

Solutions Dobell. By Edwin Pynchon, M. D., Chicago.

Reciprocity in Medical Licensure. By Regent Albert Vander Veer, M. D., Albany, N. Y.

End Results in Surgery of the Kidney, Based on a Study of Ninety Cases, with One Hundred and Twenty-three Operations. By Albert Vander Veer, M. D., Albany, N. Y..

Four Cases of Gangrene. By Albert Vander Veer, M. D., and Edgar A. Vander Veer, M. D., Albany, N. Y.

Feeding in the First Year of Infancy. By Joseph D. Winters, M. D., New York.

The Teaching of Laryngology and Rhinology in the Denver and Gross College of Medicine. By Robert Levy, M. D., Denver, Col.

Symposium on Amebic Dysentery. By John L. Jelks, M. D., Memphis, A. A. McClendon, M. D., Marianna, Ark., and J. A. Crisler, M. D., Memphis.

Thirty-third Annual Report of the Medical Director of the Cincinnati Sanitarium for the Year ending November 30th, 1906.

Report of the Department of Health of the Isthmian Canal Commission for the Month of January, 1907. W. C. Gorgas. Colonel, Medical Corps, U. S. Army. Chief Sanitary Officer.

Annual Report of the Department of Health of the Isthmian Canal Commission for the Year 1906. W. C. Gorgas.

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ever, among the classes where the resisting power was below par, or among sufferers from some chronic ailment. While the sequelae and complications of this disease may assume almost any phase of accute inflammatory character, its primary effect is upon the nervous system. Therefore, we have no hesitancy in saying, no matter what the local inflammation may require as a medicine, by all means give antikamnia tablets as a nerve sedative and to relieve the muscular pains always present. We have seen a violent cough of bronchitis treated upon the general plan, with the cough as distressing at the end of twenty-four hours as at the beginning, promptly yield to six antikamnia tablets during an interval of six hours. La grippe usually requires a double treatment, one directed to the influenza, and the other devoted to the complications present, be they of the respiratory organs or digestive tract. In all cases antikamnia tablets will be found to perform a prominent and successful part and purpose.—*Medical Reprints.*

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patient's nutrition, fortifying the recuperative powers, and thereby hastening convalescence.

DANGEROUS USE OF CURRANTS.—An English physician, James Cantile, speaks in strong terms of condemnation of the growing custom of using currants in bread and cake. The baking, he says, makes them wholly impervious to any digestive fluid, wherefore they result in serious intestinal disturbances, especially in children.

COCA AND THE SALICYLATES.—J. H., Cincinnati, O., writes to the editor of *The Coca Leaf*: "Following a suggestion in *The Coca Leaf* as to the depurative action of Coca, I have used Vin Mariani to assist the elimination of uric acid, giving the wine either alone or alternately with the salicylates. I wish to express my appreciation of this remedy, which has opened a field of usefulness to me."

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IMPENDING HYPOCHONDRIAC DEATH BY SUGGESTION.—*Modern Eloquence* relates the following: An English traveler once met a companion sitting in a state of the most woeful despair, and apparently near the last agonies, by the side of one of the mountain lakes of Switzerland. He inquired the cause of his sufferings. "Oh," said the latter, "I was very hot and thirsty and took a large draught of the clear water of the lake, and then sat down on this stone to consult my guide-book. To my astonishment I

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found that the water of this lake is very poisonous! Oh, I am a gone man—I feel it running all over me. I have only a few minutes to live! Remember me to—” “Let me see the guide-book,” said his friend. Turning to the passage, he found, “L eau du lac est bien poissonneux.”* (The water of this lake abounds in fish.) “Is that the meaning of it?” “Certainly.” The dying man looked up with radiant countenance. “What would have become of you,” said his friend, “if I had not met you?” “I should have died of imperfect knowledge of the French language.”

LONDON BRAIN-FAG.—In London the rush and concentration of business life are yearly exacting a heavier toll in brain and nerve disease. The admission waiting list of the National Hospital for Paralyzed and Epileptics is one hundred acute cases.

Sir Edgar Speyer, a financier, declared at the dinner in aid of the hospital that modern life, with its hurry and bustle, constitutes a great strain on the nervous system, and that there is a consequent increase in diseases of the nerves and brain.

In four days every week from two hundred to three hundred persons may be seen sitting in the out-patient department of the hospital in Queen Square, Bloomsbury. Most of them are suffering from some form of brain ailment or of “nerves.” There were nearly 50,000 attendances of out-patients last year.

Out of the 1100 who were treated as in-patients, 69 were doomed to die, while 200 were discharged as either cured or as much relieved.

Who are the persons who make up the army of patients? Godfrey Hamilton, secretary of the hospital, says they are in a large degree a rather different class from the patients to be seen at the Ordinary General Hospital. There are clerks, governesses, shop workers and cashiers and in the paying wards there are solicitors and doctors.

“What is wrong is that Londoners nowadays have too

*Liberalized translated: The water of this lake is very fishy or good for fishing.

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little holiday, and the thing that is needed to counteract the tendency to 'nerves' and brain trouble is a universal 'week-end,'" said a nerve specialist.

"Twenty years ago the Londoner lived nearer his work, and his work was less exacting. He was able to get sufficient recreation and rest Saturday afternoon and Sunday.

"But nowadays it is different. All London is engaged in a daily rush to and from the suburbs, in motor-omnibuses or underground trains, and most people crowd more work into less time. There is much more worry and more responsibility. The result is seen in brain-fag and nervous breakdown."

NEURASTHENIA.—To-day it is generally recognized that neurasthenia is a real morbid condition. It is not the result of modern civilization, as many writers would have us believe, but an actual disease that has probably existed as long as society. The name is not a generic term and when so used implies ignorance of the real condition it describes. Instead, it represents a specific malady with a definite etiology, pathology and symptomatology. There can be no question but that the trend of modern life, particularly under certain conditions, tends to aggravate and multiply cases of this disease. Overwork is unquestionably one of the principal causes, coupled with anxiety, worry or persistent excitement. It is a fact that the nervous system or the mental economy of any person can stand only about so much. When overtaxed the results are bound to be disastrous, just as a muscle will suffer from excessive work. Add to overwork, individual habits, including excesses of all character, and neuropathic tendencies which are all too often the result of hereditary influences, and it can be readily seen that nerve tire is of prime importance in the development of neurasthenia.

Within later years certain toxic states, such as syphilis, rheumatism, malaria, or the auto-intoxication of chronic constipation, have been recognized as important factors in the etiology of the disease. At any rate close study points

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to this important fact, that not one, but several causes unite to produce the group of symptoms ascribed to neurasthenia.

The prime object in treating this distressing condition is to restore nerve balance. Change of scene, regulation of the diet and correction of habits and faulty hygienic conditions are desirable features. But something more is always needed, and without the administration of some efficient tonic the neurasthenic will make little or no substantial improvement. The principal desideratum is to choose a tonic that goes further than mere temporary stimulation, one that will assuredly impart vigor to the nervous system, and at the same time assist each weakened organ in the re-establishment of its functions. Such a tonic is Gray's Glycerine Tonic Compound. Clinical experience has proven the therapeutic value of this well known product and under its administration the various conditions incident to neurasthenia are corrected and overcome. The nerve balance is restored, the digestive organs take up their work, normal elimination is promoted, and the various symptoms characteristic of nerve exhaustion are dissipated without the slightest evidence of undue stimulation.

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AN OLD SOUTH CAROLINA DARKY was sent to the hospital of St. Xavier in Charleston. One of the gentle, black-robed sisters put a thermometer in his mouth to take his temperature. Presently, when the doctor made his rounds, he said, "Well, Nathan, how do you feel?" "I feel right tol'ble, boss." "Have you had any nourishment?" "Yassir." "What did you have?" "A lady done gimme a piece uf glass ter suck, boss."—*Lippincott's*.

"WHAT'S THE MATTER across the way?" asked the tailor of a bystander, as the ambulance backed up to the

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door of his rival. "A customer fell in a fit, and they are taking him to the hospital," was the reply. "That's strange," said the tailor. "I never knew a customer ot get a fit in that establishment before!"—*Church Register*.

A MILFORD, O., PAPER tells us that Henry Sigmore was held up by two footpads who hit him with a sandbag in the neighborhood of the pump station.

Nephritis or cystitis probably followed.

A CHAUFFEUR'S RECOMMENDATIONS.—Studied medicine and law for three years, good experience, capital witness, summoned thirteen times without conviction, seeks position with 100-horse power motor-car.—*Fliegende Blaetter*.

A SMALL BOY threw a rock and hit Jeremiah Plowden, of Cleveland, on the boulevard, which compelled him to take to his bed as he probably could not sit down after such a blow in such a place.

VARIATIONS IN BLOOD PRESSURE.—In some conditions the tension which is above normal is not rarely present in moderate degree as an endeavor on the body to meet a need. A moderate degree of hypotensin is physiologic in some illnesses, and should not be interfered with. To whip up the circulation at this time solely because the tension is low, forces a wasteful and dangerous expenditure of energy. Only when overaction of the heart is due to low tension, or when renal or pulmonary stasis results from this cause, is interference required.—*Therapeutic Gazette*.

COLLIER'S WEEKLY ON SCHOOLS.—The function of education varies with the population. The rule of the three R's is no longer absolute. Education is compulsory throughout the country, but it may mean one thing in a New England village and another in a large city congested from immigration. The age is one of specialization. Of music and drawing many common schools now give enough to start any talent that may exist in those directions. The high schools which fit girls as well as boys for commerce

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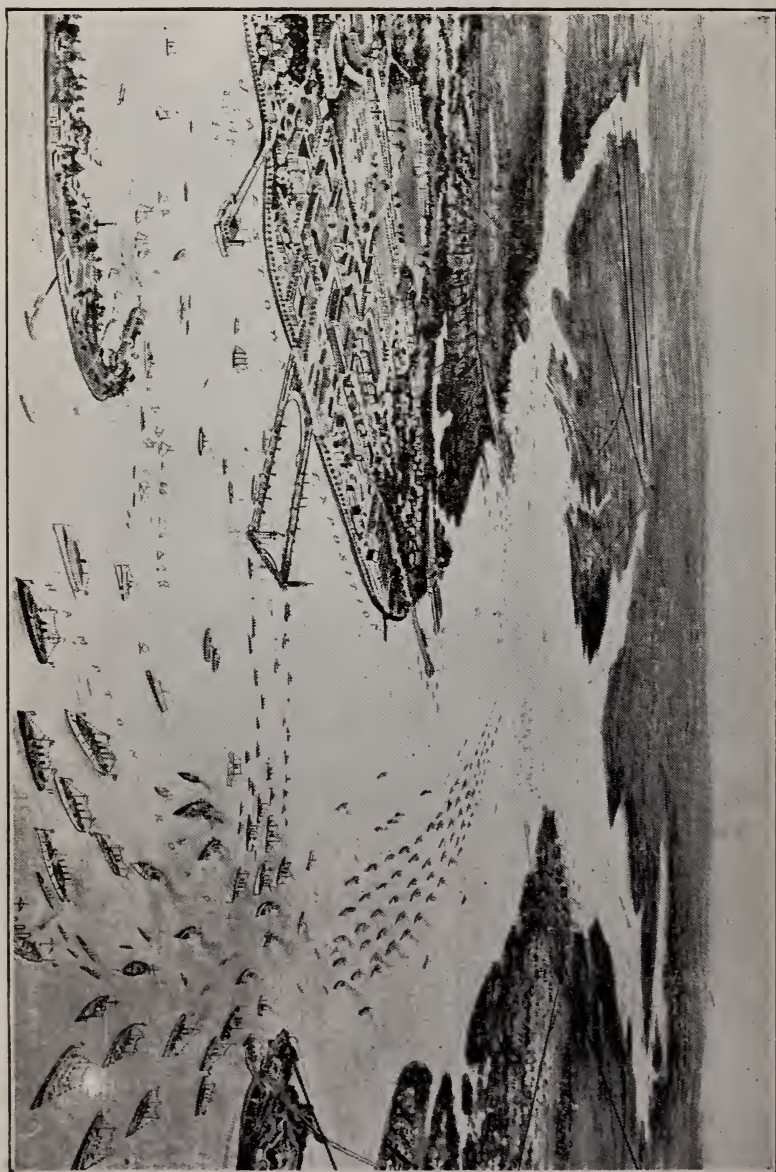
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increase in numbers every year. Normal schools prepare our teachers. In some cities the child may be carried, on the taxpayers' money, from the kindergarten through a college course. Lately we have gone a step further, and, not satisfied with elaborate opportunities for the sound, average or normal child, have been developing training for those who come maimed into this world—crippled in body or handicapped in faculty. The crippled, the blind, the dumb have been excluded from the public schools, but the less definitely helpless, but still defective children, have been allowed to clog the wheels of progress.

THE JAMESTOWN EXPOSITION. (By Charles W. Kohlsaatt, Commissioner General.)—Norfolk, Va.—To commemorate the most important event in our Nation's existence, there is to be held in the coming year a great International Naval, Marine and Military Celebration on Hampton Roads, Virginia, and contemporaneously therewith and in close accord, a great historical, educational and industrial Exposition, beginning April 26th—the anniversary of the day the intrepid voyagers first put foot on American soil—and ending November 30th. Our President, Theodore Roosevelt thus speaks of it in his proclamation: "Commemorating in a fitting and appropriate manner, the birth of the American nation, the first permanent settlement of English speaking people on the American continent, made at Jamestown, Virginia, on the 13th day of May, 1607; and in order that the great events of American history which have resulted therefrom may be accentuated to the present and future generations of American citizens."

Let us for a moment go back three hundred years, to December 19th, 1606, the day when a little band of intrepid pioneers sailed away from the precincts of London (Blackwall, on the Thames) bound for an unknown land, there to fight fever, famine, and treacherous foes, in endeavoring to establish a foothold in the land of promise, endeavors which have been fulfilled beyond the dream of prophet.

That a great and powerful nation should have sprung



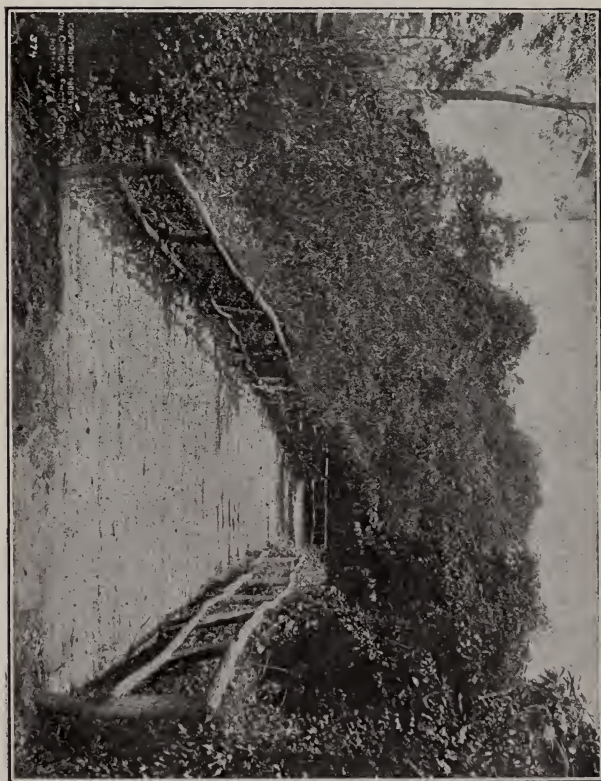
General View Jamestown Exposition.

from the little settlement made by these pioneers in 1607, on the banks of the James River, in the State named in honor of the Virgin Queen of England, would seem a fancy of a disordered brain, did not fact assure it.

The genesis of all the older nations are shrouded in obscurity, adorned with fable. The great American Republic traces its beginning to a definite *spot* where events happened and deeds were done, as thrilling and impressive as any that mark the pages of poesy or mythology.

It was Jamestown that blazed the way for all the blessings we now enjoy in our great and glorious country, and I may even venture to go so far as to say, that but for Jamestown being permanently settled, we would not be able to give thanks annually to the Almighty for all blessing bestowed upon our Nation. It is true, the Thanksgiving custom dates from the landing of the Pilgrims, but had Jamestown failed, had that handful of brave men deserted that settlement, perchance the expedition which landed many years later on Pilgrim Rock, would never have embarked. Who knows?

To digress for a moment, let me speak of woman. It is eminently proper that women play a prominent part in the great celebration since it commemorates an event made possible by a woman's act three centuries ago, for, had not the Indian princess, Pocahontas, saved the life of Captain John Smith, the dauntless leader of the first English colony in America, when condemned to death by his captors, the settlement of Jamestown Island would, unquestionably, have been abandoned, the despondent and demoralized pioneers returning to England, the new world would have been left to the Indians and the early Spanish settlers. Woman's work saved Jamestown, and women's work is to play an important part in celebrating the three hundredth anniversary of the Jamestown settlement, the real beginning of the United States. And again, it is to women we owe it, that the celebration and the great exposition are to assume such gigantic proportions. To them, and more particularly to the Virginia Women's Society for the Preservation of Antiquities, who petitioned Congress.



Rustic Bridge, Jamestown Exposition Grounds.

to preserve Jamestown Island and its historic ruins—is due the credit for inaugurating the movement from which has sprung the forthcoming celebration and exposition. Hence all gratitude and homage to our noble women, especially in this instance, to the daughters of Old Virginia.

Quoting from a late address in Congress, by an eloquent orator, Hon. Charles A. Towne, "No more momentous circumstance has ever been celebrated in this (our) country than that which is the subject of the proposed observance. It would be difficult to over-estimate the significance of the event which it is proposed to celebrate. It is one of the events that has a consecrated place of imperishable glory. In a reverend spirit we shall turn our steps in the May time of another year towards the little island in the James River, peopled not only by memories, but dedicated forever to the respect and homage of mankind, by its associations with the advent upon the continent of those heroic souls, who, three hundred years ago, braved the perils of the sea to raise their altars in a wilderness—"and be a fair beginning of a time."

Let us therefore, when the spring shall come again, gather in Old Virginia about the earliest altar erected to our civic worship in this brave new world, and there, Americans all, take upon our lips again the holy natal vows of our peculiar nationality, strong in the hope and resolute in the purpose that in the words of John Adams to Thomas Jefferson, "Our pure, virtuous, public-spirited, federative republic shall last forever, govern the globe, and introduce the perfection of man."

Let me say in Virginia's name, that in all that Virginia has of heritage and tradition, of ideals and aspirations, the country and all the world has full share, for neither a place nor a people can hold alone those things which are eternal, and when Virginia opens her gates to welcome the world she will open as well her heart and share her best with all who come to do her reverence.



Manufactures and Liberal Arts Palace, Jamestown Exposition.

THE ALIENIST AND NEUROLOGIST.

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No. 3.

PERIODICAL PARANOIA AND THE ORIGIN OF PARANOIAC DELUSIONS.*

By DR. GIERLICH,

OF WEISBADEN.

[Translated by Smith Ely Jelliffe, M. D., Ph. D.]

PARANOIA undoubtedly is one of the most pressing problems of psychiatric investigation. The views formerly held must be tested and modified in various directions, both as regards the causative factors which permit the occurrence of primary delusions under full consciousness and in the absence of melancholy and maniacal moods; secondly from the viewpoint of the course and prognosis of the disease.

As regards the etiology, there are two rather divergent views. For a long time, Westphal's view prevailed and remained uncontradicted, after he had expressed himself in 1876. (*Naturforscher-Versammlung in Magdeburg*) to the effect that paranoia is caused by abnormal processes in the sphere of conception (ideation), whereas the moods and emotions are merely dependent upon the contents of these conceptions, without playing a part in the evolution of the pathological psychic phenomena. When the paranoia problem was brought up by Cramer, in 1894, in the Berlin Psychiatric Society, strictly in accordance with Westphal,

**Archiv für Psychiatrie*, 40. 1905.

paranoia being contrasted as a purely intellectual psychosis with the emotional form—dissenting voices were raised in the discussion (Moeli), which ascribed to the emotions a contributing influence for the origin of paranoia. At a later date, Neisser refers to the significance of the effect of emotions upon the relations to the ego. Friedmann attributes a special part, though not the decisive one, to the emotions as concerned in the origin of delusions. Wernicke describes the influence of emotion upon the formation of exaggerated ideas, Hitzig points out the fact that the extraordinary influence of the emotions upon the development of relations towards indifferent occurrences in the surroundings is a matter of every-day experience. Tiling and Storring likewise advocate the importance of the emotions in the early stage of delusion. Quite recently, Specht, Bresler, and still more convincingly, Marguliés, based upon extensive experience, endeavored to prove that in paranoia the emotional sphere is primarily affected, the characteristic picture of the disease developing upon this foundation exclusively. These views were criticized and not accepted by Bleuler and Berze.

Simultaneously with these investigations as to the causative factor of paranoia, the time-honored teachings of the gloomy outcome,—gradually passing from paranoiac delusions to delusions of grandeur, and terminating in dementia,—were seriously shaken. Friedmann, for instance, described a number of cases with mild, brief delusions ending in recovery, although the insight and appreciation of the disease was not absolute in all cases. Marguliés also reports three cases of paranoia terminating in recovery, in which full appreciation was well maintained in the course of further observation.

A series of authors, such as Mendel, Meschede, Giannelli, Kausch, Bechterew, Zeinen, Hamilton—observed cases of periodical paranoia with absolutely free intervals and perfect appreciation of the disease. It has been pointed out by Friedmann that the milder cases do not as a rule enter the institutions for the insane. Hence their true character is frequently not recognized, they are misin-

terpreted and therefore appear much less numerous than they actually are. Precisely these cases, in which the observation of the initial symptoms also is especially favorable under certain conditions, are the ones permitting a thorough study of the pending questions as to the prognosis and etiology of systematized delusions.

The author is in possession of three case histories belonging under this heading. The patients have been for several years under his observation, and he has been enabled to observe at least two attacks and two entirely free intervals, with perfect accuracy, in each individual case.

CASE I. JOURNAL NO. 12. Anamnesis and Status, January 24th, 1896. Mr. X., high government official, married for 19 years. Two children, 17 and 14 years of age. Wife healthy, no abortions. Patient is descended from a nervous family, the mother and, especially the father, are said to have been markedly neurasthenic. Mother died from some acute internal affection, father supposedly from some spinal disease. Two cases of mental disturbance in father's family. Particulars not known.

Patient's birth said to have been normal. He graduated from the Gymnasium and chose a government career. Study did not come easy, mathematics proving especially troublesome, but he was unusually ambitious from childhood. Said to have led the simple life, very little resistance towards alcohol; moderate also in smoking. Career took customary course, only on one occasion the patient was not advanced, much to his regret, about a year ago. He always had periods of lassitude lasting for days, especially after prolonged work; was excitable, complained much of constipation, but did not present any other serious disturbance of his general condition. After his return from a month's fatiguing trip, connected with irregular hours and poor quarters, patient complained of insomnia, fatigue, heaviness in the head, anorexia, sluggish digestion, arrested for 2-3 days, nervousness, irritability, constant restlessness. Meanwhile, he was able to attend to his business, though at the expense of all his will-

power. He recently showed a suddenly developing mistrust towards his surroundings, but without a visible anomaly of disposition, and his behavior was perfectly correct. About two weeks ago, he expressed for the first time some delusions, in speaking to his wife: He thought he was no longer *persona grata*, and that he was to be supplanted in his position, whereas the exact contrary was true. Moreover, he thought he had compromised the wife of a colleague, namely, the one who had been advanced in preference to him; by gazing at her for a long time, though unintentionally, at some social gathering; this had attracted attention, and the woman was compromised by him, who had rendered himself impossible. The husband of this lady, gradually becoming surrounded by an actual plot, was anxious to drive him away from his post and out of the town, in order to destroy him. The patient called upon the lady to beg her pardon. Of course she had no idea what he wanted. He thereupon handed in his resignation on two occasions, which was twice graciously refused by the president. Finally, he explained to his wife that he could not continue to live with her, because she also had been compromised by him. It was his duty to give her satisfaction by instituting divorce proceedings.

Status: Patient is entirely dominated by his delusions, which he expresses with great animation, in the form previously stated. Said he must leave the country, the police were liable to come at any moment in order to arrest him. A perfect army of opponents was working against him, his wife also had joined the plot. Meanwhile, the patient was well informed as to the time, place, surroundings, etc. Pathological euphoria or depression and psychomotor inhibition had never been noted, neither did they exist at this time. The only anomaly besides well-marked mistrust was great irascibility. This was directly parallel to the delusions, and entirely dependent upon them. There was no sign of hallucinations and illusions, which were not observed in the entire course of the disease.

Physical examination: Large man, with strong, osseous system, much emaciated; said to have lost 15 pounds in

last few months. Facial features, left half of face better developed than right, especially frontal eminence. No abnormality in skull. High pointed palate, small ears, suggestion of "handle" ear. Tendon reflexes in arms and legs lively, skin reflexes normal, sensation and motion, no disturbance. Pupils equal, somewhat below medium width, react to light, convergence and accommodation. Fundus normal, internal organs, negative findings. No albumen, no sugar in the urine, no phosphaturia, no uric acid diathesis.

The condition remained for nine more days at this level. Patient had absolutely no insight into his delusions. No hallucinations and illusions could be determined, notwithstanding accurate investigation and observation in this direction. Then the entire threatening condition rather suddenly subsided. Patient could be talked to concerning one or the other of his delusions, at least he began to discuss them, his irascibility diminished, and after 3-4 days more, he showed perfect insight into his condition, together with the arrival of an amiable letter from the president. Patient fully appreciates the delusionary character of his ideas and remembers all details. No amnesia. Does not know how these delusions came to him. No indications of hallucinations or illusions at time of attack. The body weight had already begun to rise and soon reached normal; the general condition visibly improved; patient resumed his professional activity at the end of a few weeks, and everything remained well until the autumn of 1896.

After his return from the customary fatiguing business trip, the general nervous disturbances reappeared in shape of lassitude, headache, insomnia, anorexia, constipation, restlessness, irritability. By the end of November, the patient again developed the same delusions as in the previous year, without any maniacal or melancholy fore-runners. The attack promptly rose to the former level. The plot was again under way, under the guidance of the lady's husband. He was to be ousted from his position and ruined. Again he handed in his resignation in order to get rid of his persecutors, which again was not accepted.

Claimed he could not continue to live with his wife, he had compromised her too seriously—started divorce proceedings. Again, a marked loss of weight. Prompt removal from his surroundings had such a favorable influence upon the attack that the condition cleared up rather suddenly within 3-4 days, after the persecutory ideas had existed during four weeks. The patient gained complete insight into the system of his delusions, without the slightest amnesia, and without being able to understand at all how these two ideas had come about. It proved permanently impossible to determine hallucinations and illusions. Patient soon attended to his obligations as before.

In the summer of 1897, he had a substitute for his professional trip and in the fall took a long vacation, which he spent in the mountains. No nervous restlessness and delusions were noted. He returned about Christmas, feeling so well that he could not be prevailed upon to give up a very fatiguing business trip in the summer of 1898. Thus the delusions returned precisely as in the preceding years, after initial general nervous disturbances in the fall of 1898. As before, he remained very self-absorbed for some time, and then suddenly aired his delusions. The plot with the husband of the compromised lady at its head, was again in full sway, in order to ruin him and rob him of his position and his honor.

His resignation was once again handed in, and the divorce prepared for, etc., etc. Prompt removal from his home, and appropriate management, caused the delusions to subside about three weeks later, and after 3-4 days more, the patient had complete insight into his condition. There was no amnesia, and absolutely nothing to point to hallucinations and interpretations based on illusions. Neither is there any reason for assuming discrimination on the patient's part in the free interval. At those times, he would meet the wife of his colleague without any embarrassment, and stated that he felt quite unconcerned towards this lady.

In the summer of 1899, the patient was physically disabled, but no paranoiac delusions were noted. He died in

1900 of carcinoma, probably originating from the bladder. The somatic status of the nerves remained unaltered. Pupils, reflexes, sensation and motion presented no disturbances. There never was a reactionary hyperthemia. He was free from pathological fluctuations of the psychic sphere. His intelligence had not diminished to a notable extent; on the contrary, the patient always promptly met the requirements of his position.

CASE II. JOURNAL NO 36. Anamnesis and Status, April 17th, 1896. Mr. X. *Aet.* 35 years, merchant, married since two years, no children, wife healthy, no history of abortion. Patient is descended from neurotic stock, father was under author's treatment, for chronic constitutional moodiness with compulsory ideas. Father's condition said to have been even worse in early time of married life when there was a severe struggle for business existence (about the time the patient was conceived). Two brothers of father markedly nervous, one of "peculiar" disposition. A younger sister of the patient is said to be hysterical. His birth was apparently normal. Patient went to school until he passed his final examinations, then took a part in his father's business. Studied with tolerable facility, once was not promoted to higher class. States that everything connected with memory work, such as languages and history, came rather easy, whereas thought in abstract conceptions was very hard for him. He learned certain theses by heart, in a mechanical manner. Was not draughted as a soldier, ostensibly on account of a tendency to flatfoot.

Patient at an early age gave an impression of independence, showed great ambition. Was hasty and hurried in all his undertakings. Presented no psychical anomalies, especially no anomalies of temper. Never lived a fast life, had small resistance against alcohol, smoked 2-3 cigars daily. Moderate intercourse with girls. When he was 26 years old his father made him the manager of a large sawmill, which had been seriously neglected by poor administration. Patient started his new activity with extreme zeal, raising the business to a flourishing and remunerative investment

Showed considerable mercantile skill, was always sober, and is much esteemed in his native town. Married at the age of 33, from pure mutual affection. Wife brought him no money. Marriage was perfectly happy, wife of a gentle yielding disposition and uniformly cheerful temperament. This harmony was recently very seriously disturbed without external cause. In the early part of each year the patient is obliged to buy forests on a large scale, for the lumber, the year's business essentially depending upon the profit of these investments. Patient at this time is much on the road, eats irregularly, and has insufficient rest at night. Complained much of headache, anorexia, constipation, was very irascible and irritable, hurried and restless. He did not act toward his wife with the customary frankness, was reserved, quiet and self-absorbed. Ten days ago he abruptly overwhelmed his wife with the most violent delusions of jealousy and persecution. She neglected him, doing everything wrong, intentionally and knowingly, she was in league with other men, preferring everybody to him, she was tired of him, wanted to put him aside by killing him, cared only for his money, for which alone she had married him. Corresponding to his delusions, patient acts most insultingly towards his wife, whom he overwhelms with reproaches, saying that she never cared for him, married him only for his money, etc. All begging and imploring on her part proved useless. Patient is extremely irascible, contradiction especially irritating him to the last degree. He shrugs his shoulders and expectorates in front of his wife, unmindful of the presence of strange ladies and gentlemen. Once he became aggressive, so that the wife lives in constant anxiety and was several times obliged to escape by night to her relations. Patient takes his meals outside, when eating at home he forces his wife to taste of everything before his eyes.

Status: Patient is entirely dominated by his jealous delusions about his wife, inaccessible to reasoning, expresses his ideas volubly and is extremely irritable. When his wife tried to convince him he roughly repelled her and spat upon her dress. Meanwhile, he is perfectly conscious

of place, time, persons, surroundings, etc. Aside from his delusions, his behavior is entirely normal. Nothing can be discovered and observed in the line of hallucinations or illusionary interpretations. A change of disposition to abnormal cheerfulness or sadness does not exist, and was never noted. Alcoholism is excluded. Physically, patient appears as a medium-sized man, with delicate bony framework and narrow chest. Thorax unusually long, no pigeon breast, short receding forehead, remarkable development and projection of occipital protuberance, sutures plainly palpable. Dolicocephalic. Ears large and projecting, flabby without disproportion. Face evenly innervated on both sides during rest, when in mimic motion strikingly more so on left than on right. Slight degree of blepharocloria, pupils equal, medium width, prompt reaction to light, convergence, accommodation. No nystagmus, hippus, or eye-muscle disturbance. Ocular fundus normal. Tendon reflexes in arms and legs lively, no ankle clonus, skin reflexes normal. Sensation, motion O. K. No speech disturbance, no marked tremor, heart normal, pulse 78, evenly full and soft. No albumen or sugar in urine. Internal organs negative findings; on both sides moderate flatfoot.

This condition remained at this level for eight days longer, after which time the patient became more quiet in the expression of his delusions. At least he entered into discussions concerning them, and ceased to act as absolutely non-committal and irresponsive as heretofore. In about three to four days complete insight into his condition manifested itself. He now appreciates the delusionary character of his ideas, is dreadfully ashamed of his conduct, does not know what pushed him to these ideas, and tries with all his power to undo his wrong towards his wife. In this case also, there had been a reduction of the body weight (10 pounds) during the attack, which was soon recovered from. Patient has no amnesia, on the contrary is perfectly familiar with every detail during the attack. Nothing to be made out in regard to hallucinations and illusions. There were no reactionary changes of his frame of mind, his mood was perfectly normal, according

to the conditions present, neither euphorious nor depressed. The irascibility subsided together with the delusions. Intellectual deficiency was excluded. He soon felt entirely well.

Suggestions of the above condition are said to have returned in the fall of 1896, but were aborted by a journey to the South, which had been previously arranged for. Patient believed himself safe after this recreation, became active in political affairs and towards the early spring of 1897 again visited the lumber auction sales. The general nervous complaints promptly returned. Nervous lassitude, pressure in head, heaviness, anorexia, torpid digestion, restlessness, irritability. Patient soon became permanently ill-humored, and again showed a change in his manner towards his wife. Before she succeeded in getting him away from his business, the former jealous delusions returned with their old violence. The author found the patient entirely beset with his former delusions. He overwhelmed his wife with the most horrible reproaches, accused her of adultery, of purposeful neglect, said she had only married him for a home, she wanted to kill him, was after his money only. These ideas he uttered in an animated manner, was absolutely inaccessible to reasoning, became much excited when this was tried, cast contemptuous glances and gestures at his wife, spat out in front of her, and again became actively aggressive. There was no pathological mood aside from irascibility and excitement in the sense of his delusions, nor was there any acceleration or inhibition as regards the course of psychic functions. Patient is neither particularly hilarious nor depressed.

The attack was abridged by the use of baths and sulphonal, when necessary. Two weeks after the first expression of his delusions patient already showed a certain willingness to accept reasoning with him. In two or three days more he had perfect insight, without any amnesia or reactionary change. He soon devoted himself to his business with the same old energy. A son was born in December, 1897, to the great satisfaction of the father. The wife asked for a long trip early in 1898, for

she had always held the fatiguing lumber investments in the spring responsible for the nervous prostration and jealous delusions. The pleasure trip was carried out, and nothing turned up in the line of severe nervous disturbances and jealous delusions. At his return the patient found very unsatisfactory lumber investments. In the fall the wife worried for some time about the changed manner of her husband, but he developed no attack. However, another severe attack occurred in 1899. Again, as before, general nervous disturbances appeared as above, after the lumber investments, followed by changes in his manner and delusions of jealousy. The author saw the patient entirely taken up by his delusions, as in his previous attacks, without any insight. This time he believed a business acquaintance of his to be leagued with his wife against him, and he abruptly and without cause, broke off valuable business connections, much to his later regret. This attack lasted about twelve days. The patient then gained complete insight within two or three days, precisely as in the former attacks. He resumed his business to its entire extent. In the spring of 1900 he took very good care of himself. The lumber investments had been entrusted to others, and according to the wife's statements, there were only certain suggestions of the above-described condition. The outbreak was prevented by a short journey. In the fall of 1900 he was overjoyed by the birth of a daughter. In 1901 he believed himself to have entirely recovered, and returned with his old zeal to the lumber auction-sales. Again the introductory general nervous disturbances were followed without a recognizable external cause, by the outbreak of his delusion. Patient again was entirely under the dominion of his delusions. Said his wife was bad, she treated him abominably, tried to deceive him, and to get rid of him. He scolded his wife in most vulgar terms. Again his business friends were leagued with her against him, he broke off another business connection in an insulting letter to a business company who happened to send in an offer at this time. Duration of attack, about twelve days, then gradual giving in, quieter behavior, and about

three days later insight into his condition, to a complete extent. In the summer of 1902, patient was seen by the author, looking perfectly well and prosperous. A suggestion of the terrible condition had manifested itself in the spring of that year, but they promptly took a journey to see their parents, thus aborting the attack.

To repeat briefly: Hallucinations and illusions must be positively excluded. Dissimulation cannot be assumed. What reason would there be for the patient's dissimulating in the free interval? On the other hand, he was perfectly familiar with all details. This psychic alteration has nothing in common with maniacal or depressive states. The delusions are the primary feature, and the emotion is dependent upon the delusions alone. Great irascibility prevailed during the attack, there was no somatic disturbance, pupillary reflexes, etc., O. K. The intellect was not impaired. Patient managed his extensive business affairs with ease, and was moreover very active politically. Alcohol was excluded as a cause of the attacks, patient was always sober, limited his daily allowance of wine to about half a bottle, not exceeding this amount during the lumber auctions.

CASE III. JOURNAL NO. 134. Anamnesis and Status, October 12th, 1898. Miss X. *Aet.* 43 years, single. Mother living, 72 years old, well. Father died in 1884, of chronic spinal disease. A brother died of acute disease in early life, one sister living, very nervous. Father's family nervous, especially the father and one of his brothers, said to have been unusually irritable individuals, not easy to get along with. Patient's birth was normal. She was very delicate as a child, developed normally later on, readily recovered from children's diseases, Menstruated at 13, period regular and painless. As a child she had a tendency to outbursts of anger, was irascible. This improved later on, and her education met with no difficulties. Was a moderate student at school, not particularly gifted. but diligent. Refused several offers of marriage because she saw her aim in life in nursing her sick father and cheering

him in his protracted severe disease. When he died in 1884, her sorrow was extreme, and patient appeared so exhausted mentally and physically, that her mother was seriously worried. A recreation was secured by prolonged trips. Patient said to have been in good health up to 1898.

In the spring of this year she moved to Weisbaden. Since father's death she had lived with her mother, whom she loved devotedly, the relation between mother and daughter being everywhere acknowledged as exemplary. The ladies had extensive agreeable social connections and were universal favorites. The climate did not at all agree with the patient. She suffered very much from the great exhausting heat in the summer of 1898, and complained of a number of nervous disturbances: insomnia, heaviness in the head, prostration, a dislike for mental exertion, anorexia, sluggish digestion. Became visibly worse, lost in weight. The condition dragged over several months, and changes in her behavior began to manifest themselves. She was extremely irritable, always restless, hurried and discontented. Withdrew more and more from society and showed an otherwise unknown mistrust. For days together she could not be prevailed upon to leave the house, and the mother was particularly struck with the fact that she would no longer tolerate religious assistance, which on the contrary excited her very much, so that she avoided church, entirely against her habits. About the end of September, she first gave her mother an insight into the condition of her mind. She accused two ladies of their acquaintance of hostilities, as follows: "They are false friends, of course they do not let anything be seen in public, but they have forged an entire plot to push me out of the social circle, to drive me away from here by calumnies, and to throw me into despair. They will not rest until I am dead." Everybody was contriving to let her see that she had lost all esteem. Everything was being done towards her ruin. Moreover, she was no longer able to pray, as she had been fond of doing, without ever pondering over it. "I can no longer pray nor collect myself, they have robbed me of my faith, they have estranged me from the Lord, and now

they are taking advantage of it." Patient remained much of the time in bed, could not be prevailed upon to leave the house.

Status: Patient describes with great animation how her best friends turned out to be false and aggressive enemies. They were both at work to render her impossible, to ruin her good name, and then to destroy her. The two had already formed an entire plot, and they kept on calumniating until the whole town knew of it. One would not notice it to speak to them, they acted in a very friendly manner. She neither sees nor hears it, nor does she observe it from signs or movements. She had been estranged from the Lord, robbed of her faith, she is now unable to pray. She must get away from here, she will not go out here. "They would be capable of anything." Patient is perfectly clear as to time, place, persons, speaks quite calmly and readily about things outside her delusions, there is no fluctuation towards abnormal hilarity (euphoria) or sadness. She is only extremely angry and furious in the sense of her delusions and becomes violent to a degree otherwise unknown in her upon contradiction, especially towards her mother. "My mother permits everything, she does not defend me, she is also in the plot." She actually pulled her old mother's hair a few times, which would have been unthinkable outside her disease. Hallucinations and illusions could not be determined. There was nothing of importance on the somatic side. Patient somewhat below medium height, well made. Temporarily under-nourished. Near-sighted since her youth, No bodily anomalies. Pupils O. K. Sensation, motion, reflexes normal. Pulse 82, regular, full, not hard. Heart, kidneys, etc., without any pathological findings.

This condition persisted at the same degree until the middle of December, notwithstanding baths and narcotics. Then a perfect insight into the condition developed within five or six days. Patient was entirely transformed, became a refined and amiable lady, who could not understand how she had ever gotten such "crazy" ideas, and how she could have treated her mother, her dearest and best, in

such a fashion. No harsh word had ever been dropped before. She resumed her social relations, took a share in charity organizations, and acted quite naturally. There was no amnesia no reactionary hyperthermia, She was again at peace with the Lord and with religion. In the summer of 1899, the author advised that she should leave Weisbaden at an early date, in order to visit a hydrotherapeutic institution in Switzerland, at a higher level. This was done, and her health was fair. The summer of 1900 was passed by the ladies in Weisbaden, with the same unfortunate outcome as in 1898. About the middle of August the general nervous disturbances returned in the former manner: insomnia, pressure in the head, anorexia, constipation, prostration, irritability, restlessness, etc. Before a trip had been decided upon, about the end of September, the author found the patient again under the sway of her delusions. The two friends, surrounded by a perfect plot of strangers and acquaintances, were again using all means to destroy the patient by calumny, robbing her of her honor and her name. Patient always placed a very high valuation upon her (historically famed) title of nobility. The mother also was in the plot. At the same time, the incapacity for religious duties again manifested itself. She cannot pray,—so much they have been able to accomplish. Patient is extremely irascible and angry when her delusions are contradicted, becomes aggressive towards her aged mother. There is no depression, self-accusation or euphoria. Patient is perfectly clear and acts entirely in the sense of her delusions. She locks herself in, does not go out for fear she might be hurt in some way. "They are capable of anything; would instigate anybody."

Following the author's advice, the ladies promptly went to the same place in Switzerland, as in the previous summer. This plan proved a complete failure. The threads had already been open far enough. Certain persons from Wiesbaden, whom the patient knew only by sight, and who happened to be in the sanitarium, had already been at work to spread the net of calumny. Everybody had been told, and nothing but contempt was shown

her. The ladies soon returned and remained at home, The condition persisted at this level up to the third of December. The patient then became quieter, could be talked to without violent outbreaks upon contradiction of her delusions, and in about eight days her insight was perfect. Patient is ashamed of her ideas, and unhappy about her conduct, especially towards her mother. Is again reconciled to the Lord and religion. Her insight is perfect. Patient began to resume her customary social relations, and had no feeling of interference. Hallucinations and illusions were never noted, patient denying them in both good and bad days. Somatic findings always negative. There is no reason to assume a deterioration of intellect, nor had the mother noticed anything in this direction. No abnormal fluctuations of temper. Patient was last seen by the author in April, 1901, in perfect health. She left town.

All three cases concern individuals with faulty heredity, moderately gifted, but possessed by a high ambition, which endeavored to manifest itself according to individual conditions. In the prime of life, under the influence of general factors affecting the nervous system in particular, systematized delusions manifest themselves, as delusions of persecution, jealousy, etc., appearing abruptly at certain periods, without melancholia or maniacal disturbances, after the patients had been for two or three months under the sway of very severe neurasthenic symptoms. The patient is entirely under the influence of his delusions, so that his disposition and actions are governed by them. The former is expressed by great irritability and irascibility, upon the slightest attempt to oppose the delusions. Otherwise, the patients are perfectly clear during these attacks, in regard to persons, time, place, etc. There were no delusions of grandeur. The delusions persisted at full strength for several weeks, then the patients became amenable to reason, perfect insight appearing with relative rapidity, within two to four days, with subsidence of the irascibility, and without any reactionary anomalies. It was possible to prevent the return of the attacks by suitable measures, guarding against weak-

ening of the patient at a certain season, or at least the severity of the attacks could be considerably lessened. Under neglect of these precautionary measures, the attacks returned in their typical form with striking similarity, without evidence of a progress in the system of delusions. The second and third attacks presented a less violent reaction than the original attack. This may be partly referable to the better training of the surroundings, who were more calm in their interpretation of the condition and more sanguine about the prognosis. In part, the author is of the opinion that the patients were somewhat more accessible to professional influence, notwithstanding their absolute adherence to their systematized delusions. Deepseated, progressive disturbances of a psychical or somatic character were not observed. The intelligence was not demonstrably diminished. There was nothing in favor of paralysis. The attacks are accompanied by a marked decrease in weight.

Among similar observations reported in the literature, the first parallel must be drawn with Ziehen's case. Here also we find systematized persecutory delusions with great irascibility, without the influence of hallucinations, appearing periodically, with perfect insight in the intervals. Hamilton's case probably also belongs under this heading, periodical appearance of persecutory delusions in a woman having Basedow's disease. Bechterew's patient likewise belongs here, since the occasional hallucinations and illusions were devoid of influence upon the systematization of the periodical delusions. This case is especially characterized by the appearance of delusions of grandeur side by side with persecutory delusions. In the other cases of periodical paranoia, hallucinations existed at the beginning of the disease, and were not without influence upon the systematized delusions. However, it is stated by Kausch, that his patient's lack of judgment, and therefore the formation of the systematized delusions could hardly be caused solely by the hallucinations—which were chiefly of an auditory character—without the patient's even attempting to convince herself with the assistance of other senses. Kausch also accordingly does not hold the hallucinations alone responsible for the origin of the delusions.

Bleuler recently described 11 cases of periodical delusions, 10 of which presented more or less marked symptoms of manic-depressive insanity in the anamnesis, only one case being entirely free. Bleuler inclines to subjoin these cases entirely under manic-depressive insanity in the sense of Kræpelin. Chronic paranoia likewise is frequently introduced by depressive symptoms. Bleuler's point of view is possibly justified, and a favorable prognosis to be anticipated, whenever manic or manic-depressive mixed forms are demonstrable in chronic delusions. In those cases, however, in which the delusions, the salient feature of these conditions, develop gradually, entirely along the lines of paranoia, in the absence of manic or manic-depressive mixed symptoms—the course cannot be determined at the present day, and accordingly a separation of the mild forms from the unfavorable ones is not feasible in the opinion of the author.

What do we learn from the above observations in regard to paranoia and its etiology? There are cases presenting the picture of paranoia, developing systematized persecuting delusions, with great irascibility, without fluctuations of hilarity and sadness, lasting for several weeks without sensory impairment, passing rather rapidly to perfect insight into the condition, with a tendency to periodical recurrence. The prognosis is favorable as regards the individual attack, but unfavorable as regards recurrence. When periodical paranoia is designated by Kræpelin as a *contradictio in adjecto*, this presumably means merely a difference of opinion in the naming of the above conditions; namely, are they to be summed up under the name paranoia or not. The author thinks that the conditions under present discussion cannot be distinguished from paranoia at the time of the attack, and are merely characterized by the absence of progression and the mildness of the course. Similar conditions prevail, as in the case of *dementia praecox*, the character of which was formerly assumed to be invariably unfavorable, but appears less and less serious in the light of recent observations (Otto Diem) so that Kræpelin also mentions an outcome in re-

covery, without or with deficiencies. Nevertheless, the designation has been retained. In a similar way, these mild, systematized delusions are sufficiently differentiated by the qualifying term "abortive" for some, and "periodical" for others, from the severe forms of paranoia which pass from persecutory delusions to delusions of grandeur, and finally into dementia.

Do these observations furnish information concerning the genesis of the delusions? Marguliés discusses the divisibility of conscious processes into two components, namely, memories and emotions. Complex conceptions are formed by the solid junction of similar memory pictures, associated in times or space, with the corresponding emotions. The emotions are at least twofold: firstly, those associated with the sensory impression of the memory picture; secondly, more accidental ones, depending upon the individual's frame of mind during the acquisition of the memory. Marguliés endeavors to furnish this proof to the effect that some disturbances in the degree and course of these emotions constitute the source of the delusions at the outset of paranoia. Are these presumptions correct in the cases of these three patients?

The first patient, about a year before the outbreak of the disease, was hurt by being passed over in certain promotions, showing that his official career was at an end. Given his ambitious character, he remained for a long time under the painful impression of this slight and underestimation of his merit. He states that he often experienced difficulty in overcoming a feeling of incompetence, coupled with envy towards his fortunate rival, but succeeded in doing so by comparisons with the amiable delightful manner of his colleagues and superiors. "We are poorly promoted, but well treated." When patient felt bodily and mentally worn out after the strenuous summer, these painful, tormenting feelings returned with greater strength and frequency. He would remain for days together under their way, without being able to shake them off. Next, he believed he discovered changes and unkindness in the behavior of his superiors towards him, and thus one

fine day, the suppositious affair with the wife of his fortunate colleague led to the outbreak of his delusions of injury and persecution.

In the second case, the patient, a wealthy saw-mill proprietor, had married a poor girl, to the general surprise of the community. Patient states that he always sought extreme happiness in marriage and made his choice from pure affection, assuming the same to be true on his wife's part, for else marriage would be intolerable to him. Off and on, certain doubts would arise in the sense of the gossiping neighbors, whether or not his wife had actually married him for love, or for the sake of a home, so that now he was in her way. As soon as he was together with her, and realized her gentle, clinging manner towards him, his doubts as to her affection disappeared entirely. In the months when he was tired and worn out, these doubts as to his wife's affection attacked him more frequently and severely. For awhile, he fought against these painful feelings, but soon looked at everything she did from another point of view, and promptly stood entirely under the influence of the jealous delusions.

The patient mentioned under III. is a society woman proud of her name, anxious to keep her title and social position free from blemish, very ambitious to play a leading part in her social circles and to arrange festivities in the interest of charity. These habits were seriously interfered with by the severe neurasthenia from which she suffered after the hot summer. She felt her incompetence, and saw herself forced upon several occasions to leave social gatherings. Neither was she able to attend to her duties as president of various associations, all of which deeply grieved and annoyed her. She regarded her successor with bitter envy, got into a highly irritated condition, and was finally unable to repudiate the idea that her friends rejoiced over her misfortune and profited of the situation, in order to drive her away from her position and out of the town, ruining her by all sorts of calumnies. In this manner, she developed her persecutory delusions. The author was unable to ascertain definite particulars concerning certain

especially striking social "breaks" of the patient's, dominating the emotional sphere, but a number of painful situations were admitted, which troubled the patient for a long time, and over which she pondered considerably.

The above observations, especially case 1 and 2, concern imaginations, corruptions which even in health are associated with a peculiarly distressing and troubled frame of mind, as they enter into consciousness. This frame of mind increases to such a degree in neurasthenic dispositions, which are especially susceptible to all negative emotions, that it dominates the individual in the sense of a compulsory idea emotion. This conception is burdened with an intensely distressing sensation of unhappiness, anger, or envy, dominating the psychical behavior of the individual to such an extent that no associative or perceptive activity (in the sense of Wundt) is capable of exerting a corrective and diverting influence by comparison or contrasting conceptions, such as is constantly the case in physiological error. Moreover, the pronounced degrees of emotion do not permit the conception to drop below the threshold of consciousness. We are dealing in the first place with a process, with which we are familiar enough in a similar manner, as a compulsory idea conception. On closer consideration it is seen, however, that it is not so much the conception which here forces itself upon the patient, as rather the associated frame of mind, which dominates the scene, and serves to distress the patient. "I could not get rid of my anger and unhappiness, as soon as the idea appeared." When on the other hand, the conception entered into consciousness in well days, without the weighty, overwhelming emotion sensation, the patient readily succeeded in banishing it below the threshold of consciousness. Hence, we are here dealing with a compulsory emotion. Compulsory conceptions are known to pass over in certain cases into so-called insanity with compulsory conceptions, closely related to delusional conceptions; and this was extensively described by Binswanger (Neurasthenia.) The closer relations of compulsory ideas towards delusional ideas are further discussed by Cramer, and especially by Friedmann. The latter says:

"Whether an object thought of becomes a compulsory idea or a delusional idea, is *not* dependent upon the kind and mechanism of its appearance, but depends in the first place upon the type of mind and the temporary mental condition of the thinking person." Loewenfeld expresses himself as follows: "Psychical compulsory phenomena constitute an extensive boundary region between mental health and the pronounced mental diseases, into which they pass only very rarely however, even in their severest forms." Accordingly, we might reach the conclusion that a similar compulsory emotion, be it anxiety, expectancy, slight error, envy, etc., would lead to systematized delusions, provided it has the sufficient strength and duration. But there are certain weighty objections to this view, in the opinion of the author. It is a rather wide and arbitrary step from the objective interpretation of the situation, which appreciates the whole as a pathological irresistible coercion, to a failure to recognize this point of view, in the absence of all criticism. Every practitioner is acquainted with a number of cases in which severe disturbances in the emotional sphere (described by Margulíes as the source of delusions) are observed to follow an accentuated conception in the sense of expectancy, anxiety, etc.; dominating the individual for a long time without leading to delusions. These conditions are frequently observed in officers of the army.

Cases. A captain, patient of the author's, *Aet.* 41 years, nervous ascendancy, himself generally nervous for years, was severely criticised by his highest superior at a review. He developed a highly neurasthenic condition, standing continuously under the painful impression of the occurrence, always in fear of his discharge, which would be his death. This condition lasted for years, without leading to delusions. A colonel, slight nervous heredity, was unlucky in the army exercises at the annual manœuvre, and was criticised without having deserved reproof. He had hardly been nervous before, but soon developed a severe neurasthenic condition. Of high ambition—father of five children—not a wealthy man—he lived in constant fear and anxiety in regard to his discharge. Although this condition

was maintained for months at the same level, no delusions were noted.

The following case even more closely resembles the observations of Marguliés: A merchant from Holland, *Aet.* 39, not much faulty heredity, self-made man, now has extensive business, which he manages with his wife. Patient became nervously irritable without visible cause, had insomnia, gradually developed severe neurasthenia, was extremely restless and irritable. At the height of this state, he said that prosecution by the district attorney was threatening him, that he had ruined his business and his family. Patient made several attempts at suicide, tried to jump out of a moving train, and could only be restrained by violence. No signs of paralysis. After a short time, patient admitted under urgent persuasion that a year previously he had signed a blank check for a business acquaintance, without the knowledge of his wife. This acquaintance had meanwhile been declared in bankruptcy, and a prolongation of the check was impossible. He, the patient, being unable to meet the amount, he would be prosecuted by the district attorney and punished with imprisonment. The sum amounted to 15,000 florins. Payment of the debt was promised per telegram by his relatives, with the result that the pathological picture underwent an abrupt change, although the neurasthenia subsided gradually only. No delusions were observed notwithstanding the high degree of the anxiety and expectancy.

Other cases are known, in which compulsory ideas persisted for a long time the patient always remaining aware of the outside abnormal compulsion. A gentleman, patient of the author's, has been suffering from this kind of an emotion for over ten years. He had accompanied his mother to a concert. Ten days later, she had an attack of pneumonia, from which she died. The patient has since remained under the impression of the sad reproachful feeling that he had not assisted his mother with the desirable promptitude in putting on her coat when leaving the concert hall, and that he had thereby caused her death. As a matter of fact, there was nothing to support this view.

Although the patient suffered severely under the weight of this emotion, there was no transition to delusions.

Recently, Berze endeavored to prove in an important dissertation, based upon Westphal's views, that the leading part in the origin of delusions must be attributed to the *intellectual* rather than the *emotional* activity. Berze closely follows Wundt, explaining that "the psychopathological foundation of chronic delusions is a disturbance of the perception, which consists in an interference with the process of raising a psychic conception into the internal viewpoint. This interference is said to induce primarily the idea of passiveness as a sequel to passive perception. In the second place, this interference results in the suspension of a series of perceptive acts, which take place without difficulty in the normal individual. In the third place, this interference results in delay of the sinking of (conscious) psychic concepts below the threshold of consciousness. This prevention of appreciated concepts from sinking below the threshold of consciousness, combined with the limitation of the conscious concepts, is said to lead to compulsory faulty associations." The participation of "the idea of passiveness results in, erroneous relations to associations with the ego." The argumentation of these principles from the psychological point of view is clever and convincing throughout; only the question arises why delusions do not occur with greater frequency in the course of neurasthenia, in which disturbances in the mechanism of the intellectual functions, as above described, are the rule (difficulty of raising a given conception into consciousness; interference with sinking below threshold of consciousness, without emotional basis.) The idea of passiveness, during the process of psychic perception, is shared by the healthy individual, according to Wundt; it is simply intensified in the above condition.

It is a common complaint of neurasthenics that they suffer a good deal with difficulties in thinking and the course or sequence of thoughts; this disturbance causing them much distress. Again, it must be admitted that suggestions of systematized delusions are by no means rare in these cases, if attention is directed towards them:

Mr. X, assessor, *Aet.* 33, nervous family history, good mental equipment, led a very fast life as a young man, worked very hard between whites, had influenza before his final examination, which he passed with a good mark a week after leaving his bed. This was followed by a severe attack of nervous prostration. Patient is unable to think, therefore does not care to converse, cannot discuss subjects relating to the law, which used to be mere child's play to him. Abstract thought is very difficult and painful. Memory good. Patient frequently shows suggestions of systematized associated delusions. One day he refused to enter the consulting room and began to pack his trunk. When finally persuaded, he said: "I must ask you first of all, if you are still willing to treat me. I notice that I am troubling and disturbing you." "What makes you think so?" "It became perfectly evident to me as you came into the room this morning." (Author says that he was always particularly amiable towards the patient, knowing his sensitiveness.) He allowed himself to be talked out of his idea, but every few days he had some notion towards one or other of the patients, to the effect that they wilfully neglected him, that he was uncongenial and unwelcome, that they showed this by all sorts of hints, etc. Twice he confronted a gentleman in his room, asking him directly for an explanation. The others, of course, did not know how the patient got these ideas. After an explanation, peaceful relations were always re-established. This conduct was diametrically opposed to the gentle amiable character of the man. Patient at present does not work and lives under very favorable conditions. Author says he can readily imagine that in this case the ground would be well prepared for the development of systematized premonitory delusions under a strong emotional impetus, combined for months with a feeling of anxiety, expectancy, envy, etc.

After all these observations and deliberations, it is intelligible that the author cannot identify himself with either of the two groups which at the present day are arrayed against each other as regards the origin of delusions in paranoia. This seems to him neither a purely intellectual disease, nor primarily referable to the emotions alone.

The correct solution of this problem probably lies in the middle. The foundations of the delusions, in the author's opinion, consist in disturbances of the frame of mind by violent protracted emotions of expectancy, suspense, anxiety, anger, envy, etc., in combination with an existing weakness of judgment towards these highly accentuated ideas. On the other hand, the associations and perceptive connections must take place in the normal manner, both *per se* and in their mutual relations (the foundations of the critical faculty) towards the less accentuated emotional ideas and conceptions. Mistrust is not an emotion in the above sense. It originates only as the result of the delusional interpretations, as pointed out by Bleuler and Specht, more recently by Schultze. The further course, as leading to recovery, arrest, or progression (delusions of grandeur and dementia,) depends essentially upon the brain-power, which determines whether or not the delusional interpretation extends later on to ideas not accentuated in the above sense, and whether or not it continues after the subsidence of the emotion. In which one of the three above mentioned components of normal judgment the disturbance first asserts itself, is still a matter of purely theoretical consideration. Friedmann assumes thinking in short associations, whereas Berze refers the primary impetus to the passive perception. As a matter of fact, the function of perceptive synthesis and analysis, imagination and intellectual activity in the sense of Wundt, is probably responsible in the first place, as the most important mental function. Being inhibited in its function, due to the strong outside sensation, the perceptive faculty presumably loses its objective standpoint towards the complex conceptions, as they arise with all the force of a suggestion, in mild otherwise not recognisable disturbances—leading to delusional conclusions in the sense of the conception.

The cases so often quoted by Cramer, Berze and others, in which the emotional foundation cannot be demonstrated to the above degree at the onset of the delusions, become more intelligible on the basis of the author's assumption. It is intelligible that the two requirements

for the formation of delusions may approximately supplement each other, in such a way that the perceptive exhaustion in the above sense manifests itself only in connection with a very marked emotional accentuation, or in milder accentuations, respectively.

As the author's article was being concluded, he received a paper by Ernst Schultze, in Bonn, in which the writer in his lucid manner urgently advocates the causative importance of the emotions at the onset of paranoia, but proceeds to recognize a disturbance in the intellectual sphere in the sense of Gierlich's arguments: "Of course it is not maintained that every intellectual disturbance is excluded in the development of paranoia, for it goes without saying that there exists a disturbance, under the influence of the emotional disturbances, the impressions are fixed from one point of view only, are rendered erroneous, resulting in observations which do not correspond to the actual facts. However, this does not imply a defect in the intellectual sphere, or a quantitative disturbance. The emotional accentuation of the newly developed conceptions is far too intense to admit of correction." Schultze further explains that paranoia in the true sense does not develop in imbecility and idiocy. These delusions are characterized by the absence of assimilation according to great uniform principles, and the condition is preferably referred to as idiocy with delusions. Hence, the paranoiac must be a "past master in the architecture of thought," who loses his power of correction towards the strongly accentuated emotional conceptions, the balance of his critical faculty remaining normal.

EROTOGENESIS OF RELIGION.

BY THEODORE SCHROEDER,

63 East 59th Street, New York City.

EVERY definition of religion is resolvable into this: Religion is man's conception of his relation to those among the supposed objects of his dependence, to which his relations seem so mysterious that he deems his acquaintance with them due to transcendental experiences. Man's gods are his conception of such objects of dependence, which, in turn, involve his explanations of the mystery. Symbolism and institutionalism in religion are but man's imperfect objectivations of these concepts. Idolatry is the worship of a man-made symbol in lieu of the concept symbolized, and is developed by a process of gradual and unconscious substitution, with a final consecration, and a belief in its being an incarnation of the diety.

The God idea, like the idea of the good and the beautiful, is a mere abstraction, not an objective reality cognizable to man as such, but wholly, solely and unalterably subjective, finding its only justification in the feelings of man, though seldom so understood. The history of religion is, therefore, but a record of man's objective manifestations of such subjective states. Thus viewed, the study of religious phenomena is essentially a branch of psychology, and the methods of material science, adjusted to the order and relations of objective phenomena, are applicable so long as we are examining the religion of others. The scientist must study the manifestations of religion as the alienist studies the utterances of the insane, namely: as a means of classification, and for the discovery of causal conditions within, as well as without, the individual.

Variety of religions is the product of evolution, a part of universal evolution. The difference between the individual worshipfulness of some primitive peoples and our modern, highly-diversified, religious organizations, only exemplifies the law of evolution, which is ever a transition "from an indefinite, incoherent homogeneity to a definite, coherent heterogeneity."

In criticism of Spencer, Lang, Taylor and others, in their efforts to interpret religion in terms of the law of evolution, it has been justly said: "However interesting these [their] theories may be, however much light they may shed upon the religious life of primitive and civilized peoples, the question, 'How did primitive man obtain conceptions that we call religious?' is not solved."*

However, by applying the law of evolution to the known facts, we may be able to retrace the evolutionary process to the beginnings of religion, and having thus found the initial object of worship, we are in a better situation to answer the inquiries as to how, whence and why man acquired religious experiences and concepts.

If we desire to retrace the evolutionary processes of religion to their origin, we begin by arranging the objects of worship according to their evolutionary chronology. This is accomplished by classifying them as relatively close to or far evolved from the beginnings, according to the degree of complexity implied in the religious concepts, and the degree of conscious knowledge of man's relationship to his environment, which is implied from his choice of the objects of worship.

Since continuing evolution is conditioned upon an ever widening mental horizon, that religion is nearest the primal deviation from the non-religious which implies the least knowledge of our environment. Because the worship of an infinite, purposeful, divine imminence implies a wider knowledge of the world and of the universe, than does the worship of isolated natural phenomena, therefore theism, as now defined, is conclusively proven to be a later evolutionary development than the worship of a mountain or of

*First Principles, Spencer, p. 407. Appleton Edition.

lightning. The first among the religions of which we have knowledge must be that one which implies the least or no conscious acquaintance with the objective. Judged by that test, it follows beyond all reasonable doubt that sex-worship must have been the very first form of our known religions, since the conditions of its development are wholly within each individual.

When unconscious automatism was transforming to human self-consciousness, beyond all doubt one of its very first cognitions must have been the primal impulse that makes for progeny an accompaniment of sex-ecstasy. This is so for many reasons, and among them the conspicuous changes and periodicity of its manifestations, would compel an attention which a more uniform activity would escape. Then was the age of racial adolescence. Savages and children animate all things with a psychic life, and ascribe to a special volition all activities which excite their sorrow, joy, hope or fear.* It is a necessary inference that in primitive man this tendency was at least as pronounced as in present-day children.

Becoming conscious that sex-impulse was uncontrollable by his own act of volition, man naturally assumed that the generative organs had a psychic life of their own, by which they know the how and why of their own activity, seen to be so well adjusted to the end of procreation. Necessarily such a man ascribed the phenomena of sex-excitement and sex-functioning to an intelligence not his own. Because he had not yet become conscious of his relation to his environment, he naturally gave that intelligence a local habitation within the virile member. As late as 1729, I find a Christian clergyman writing of it as the "receptacle of a manly soul."[†]

Phallic worship was inevitable. To primitive man in racial adolescence the sexual mechanism and functioning is the first conscious, the greatest, and almost the only intense joy of his experience; the first visible and most

*Chas. F. Hemingway, in v. II. *Am. Anthropologist*, p. 376.

[†]See Hibbert Lectures, 1891, pp. 52-58. Also *Fact and Fable in Psychology* and *Taylor's Primitive Culture*, for illustrative facts.

immediate course of life, the first object of conscious dependence; the first mystery presented to consciousness demanding solution and inspiring awe; the first sense perceived associate of his highest, his deepest and almost his only hopes, longings and joys, as well as the instrumentality of their realization.

It was unavoidable that the solemn awe of sex-mystery, the seeming transcendence of sex-ecstasy, and the predominance of a conscious-dependence upon sex for joy and life, all combined with the supposed intelligence ascribed to the sex-organs, would fuse into a worshipful reverence of the phallus, as the original, objective, intelligent and ultimate source of all that to primitive man was worth having. In the nature of things, therefore, these elements made sex-worship the first religion, and they are the essentials of all religion, even to this day. A growing knowledge has caused us often to change our opinions as to the situs of that other intelligence which controls our destiny, but the essence is still the same. When we shall have solved the mystery of generation, abolished the awe of ignorance, and no longer experience the ecstasy of love, religion will have ceased to be. In these considerations we find a complete answer to the question, "How did primitive man become religious?"

Prehistoric archaeology has also contributed evidence to show that phallic worship is the oldest religion. A modern writer has this to say about our theme: "There appears to be a chance of this [phallic] worship being claimed for a very early period in the history of the human race. It has been recently stated in the *Moniteur* that in the province of Venice in Italy, excavations in a bone cave have brought to light, beneath ten feet of stalagmite, bones of animals mostly posttertiary, of the usual description found in such places, flint implements, with a needle of bone having an eye and point, and a plate of an argillaceous compound on which was scratched a rude drawing of a phallus."*

There can be no objectivation of a concept, as in a

*The *Moniteur*, June, 1865, quoted in *The Worship of the Generative Powers*.

drawing, until man has become self-conscious. It, therefore, follows from the very nature of our thinking processes, that man could not make a drawing of the phallus until after he had become definitely self-conscious of some of the phenomena of sexuality. Since with the genesis of such a consciousness the primal phallicism must have come into being, it follows that the drawing above referred to was made after the beginning and probably because of sex-worship. This easily fixes the existence of phallic religion, ages anterior to the known existence of every other kind of religious manifestation.

Since the course of evolution is marked by a change "from incoherent homogeneity to a coherent heterogeneity," it follows that we are retracing the course of religious development so long as the proportionate homogeneity and its incoherence are on the increase. The end of this retracing cannot have been reached so long as the object of worship is an abstraction or a generalization, since both necessarily imply a prior acquaintance with, and probably a worship of the concrete. It would seem, therefore, that the initial object of worship must have been concrete. Neither could it have been the same identical concrete object that first induced religion in each primitive man, since a conscious relation of the whole human family to the same object implies a very high degree of coherence between all. The ultimate of religious incoherence is reached only when the indulgence of religious sentiments is that of each man in a state of absolute religious isolation.

Among all the historically known concrete objects of religious reverence only one will admit of the hypothesis, that all the conditions of its religious adoration were present in and for every man, and with him wherever he is, on every part of the earth, at the age of religious awakening, either individually or racially considered, and at every other time as well. That one object is the sexual mechanism. Only in the primal sex-worship of racial adolescence, when every man finds a part of himself to be the source of every religious essence and the object of his religious sentiments, can we find that ultimate incoherence and homogeneity

which the law of evolution conditions as existing at the time of religious inchoation. By this test, we again reach the conclusion that sex-worship must have been the first of all religions.

The religious homogeneity which the law of evolution postulates as the condition of the primal deviation from the non-religious, demands that if sex is the generant of religion, and this came about as an unavoidable consequence of the conditions of racial adolescence, that then all peoples, where religion has come into being, must have had some form of sex-worship at and near their religious beginnings. This means that at the times of its inchoation, a religion with a distinctive sexual foundation must have been geographically universal over the portions of the globe inhabited by native religious humans. That phallic worship was thus geographically universal is the testimony of every serious student of this cult.

Says Richard Payne Knight: "Those who wish to know how generally the symbol [of the phallus] and the religion which it represented once prevailed, will consult the great and elaborate work of Mr. D'Hancarville, who, with infinite learning and ingenuity, has traced its progress over the whole world."*

Another student of the subject, adds this testimony: "Of the extensive prevalence of this worship [of the human organs of generation] we have ample evidence. It occurs in Egypt with the diety Khem, in India with Siva, in Assyria with Vul, in Greece with Pan and Priapus, in the Scandinavian and Teutonic nations with Fricco, in Spain with Hortanes. It has been found in different parts of the American continent, in Mexico, in Peru and Hayti; in both these latter places numerous phalli, modelled in clay have been discovered, and in the islands of the Pacific Ocean on festive occasions, a phallus highly ornamented, called by the natives Tinas, is carried in the procession."†

Clifford Howard, another student of sex-worship, contributes this statement: While the highest development of

*The Worship of Priapus, p. 15.

†Nature Worship, p. 12.

phallicism was reached by the ancient Egyptians, Assyrians, Hindoos, Greeks and Romans, proof of the existence of this form of religion is to be found in every part of the earth inhabited by man. Persia, India, Ceylon, China, Japan, Burmah, Java, Arabia, Syria, Asia Minor, Egypt, Ethiopia, Europe and the British Isles, together with Mexico, Central America, Peru and various other portions of the Western Hemisphere—all yield abundant evidence in support of the universality of phallic worship as a primitive form of religion, and of the common origin of theological creeds.”*

These facts again confirm our former conclusion that sex-worship is the primal religion from which all others have evolved.

We must further verify our conclusion, by determining whether the sequence of events implied in it corresponds with the natural order otherwise determined. In other words, can we verify the implication that emotional religion preceded the rational form. In the course of evolution the emotional life precedes that of conscious reason. Affinity and aversion, feelings of pleasure and pain, existed as an automatic reaction upon environment, long before they were the basis of conscious ratiocination. It is not thinkable that in its specialization as to religion, this order of events should be reversed, and rational religion antedate and develop the emotional.

The spontaneous unreflecting feelings of joy and terror which are displayed by even lower animals in the presence of certain natural and mysterious phenomena, is a fundamental fact of religion, and the first mysterious joy to arise into consciousness would be that connected with sex.

When in the course of evolution man attributed to it a psychic personality, analogous to, but more exalted than his own, the sentiment he experienced toward it and his instinctive groping in quest of an agreeable relation with that mysterious being constituted his religion. Conscious reasoning was not invoked until long after. When man has become self-conscious and capable of introspection, and when he seeks to explain his emotions and his relation to

**Sex Worship*, p. 12.

their supposed source, he first begins conscious reasoning as to any phase of his religion. Not until then can he seek for the establishment of any ideal relation with a mysterious higher power. Thus science and philosophy are but the rationalized expurgations of religion. What is still unexplained is the only exclusive property of the church.

As we can draw no exact line between health and disease, so neither can we draw such between the unreligious and the religious stages of evolution, because they so gradually shade into each other. The infant in its cradle automatically responding to an agreeable stimulus when its mother approaches, stretches forth its arm imploringly with the attitude of mind that would propitiate, long before it has taken to reasoning either as to its relation to, or the character of its mother. So did man in obedience to his emotions automatically seek an adjustment to the mysterious, at first within and later without himself, which consciously-sought adjustment is religion, long before he expended any conscious effort toward the solution of the mystery,—the contemplation of his object of adoration,—his God.

Therefore we must conclude that the conception of divinity did not engender religious sentiment, but rather that the presence of mysterious emotions brought man to believe in the existence of gods and subsequently, in explanation of his emotional states, to reason as to the divine nature. "The truth is that in the metaphysical and religious sphere, articulate reasons are cogent for us only when our inarticulate feelings of reality have already been impressed in favor of the same conclusion."*

No matter how we define religion, its emotional states long preceded the effort at a rational explanation for their existence and relations. Religious emotionalism, preceded rational religion, and this, again is as it must be if religion had its beginning in sex-ecstasy. Among all the objects of religious worship, only the phallus can supply all the conditions necessary for a subjective emotional religion, such as must always precede a reasoned view of man's

*James' *Varieties of Religious Experience*, p. 74; also Prof. T. Thomas' *Sex and Society*, p. 118.

relation to his physical environment, such as could induce the worship of any portion of it.

In the return from the zeal of intolerance back to rationality, hospitality is extended to differences of opinion as to economics, science, government, etc. The last two fortresses of bigotry are the belief in spiritual existence and sexual ethics. Even with persons in whom all semblance of religious doctrine or observance is dissipated, and an unlimited hospitality for intellectual differences is allowed upon practically all questions, the last remnant of bigotry will be certain to be an intolerance for differences of opinion as to sex ethics.

It is a significant feature that the only inter-human relation not of necessity associated with or developed through religious theories, and which is accredited "sacred" or "spiritual" is the relation of men and women. Even the scientific religionist who can find "spirituality" almost nowhere else, can still discover a "spiritual" significance and "sacramental" character in marriage. If our theory is correct we should find it so. All the frenzy of fanaticism would then be a mere religious superstructure to disordered nerves, finding its religious element in the passional centers of physical organism. Since it is the law of devolution that the last acquired functions are the first to disappear, it follows from the fact that sex-superstition is the most persistent of all superstitions, that it is the source of all superstitions.

If, racially speaking, religion had its origin in a misinterpretation of an unidentified sex-ecstasy, it would seem to follow that some of this essence must be still present as one of the unrecognized elements in the individual experiences of the religious enthusiast. That is true, as also is this, that whatever is conspicuously true of all great religious enthusiasm is in lesser degree true of all distinctively religious experience. What are the facts in this respect?

Many years, devoted to the historical study of religious revivals, enthusiasms and abnormities leads me to this conclusion: Every intense and widespread religious revival has produced increased sexual irregularity. Every concerted

effort at the establishment of compulsory sexual excesses, either of repression or indulgence, has found its warrant in religion and its beginnings amid religious excitement. Every known type of sexual perversion, from salist lust-murder—up and down—has been credited with the endorsement of some god, and advocated and practiced by some religious society. Every organized effort toward ostentatious sexuality has found its justification in religion. Here, I have in mind those numerous small sects, such as the Adamites, with whom parade or worship in nudity was esteemed a duty to God, and those other anomalous creatures who go about wearing badges or uniforms, which unceasingly and ostentatiously advertise their "chastity." Were persons to announce through the newspapers their unseducible virginity, we would believe them sexually insane. When the same end is accomplished by conventional monastic methods of giving publicity to the same boast, we think nothing of it, only because we have become accustomed to it.

From the time of the pre-historic sex-worship of primitive peoples to this very hour, the desire to regulate other people's sexual affairs has been the most zealously pursued of all the ambitions of religious societies.

If then this mad overvaluation of the divinity, sacredness, spirituality or sinfulness of sex is a universal concomitant of the frenzy of religious fanaticism, it would seem to follow that there must be a good deal of undifferentiated sensuality in all religious enthusiasm of lesser degree, and this again confirms the conclusion, that in so far as religion is still a personal experience, an emotion, instead of cold and passionless science, to the extent that it is a matter of "love," as is often proclaimed, it is again of erotic origin.

Once realizing fully that man's religion found its origin and warrant within himself, and that of necessity the evolutionary modifications were impelled by similar envioning conditions, it follows that these facts will explain the similarity of the religious product on various parts of the earth. This involves a reversal of our method of studying

the migrations of man. Owing to the myths about the the creation, it was once thought necessary to explain all similarity, whether religious or otherwise, as the product and evidence of a common Adamic origin.

Now, that we accept universal evolution, we must come more fully to appreciate the fact that the evolutionary development of life may have reached the human, self-conscious stage in many different places at substantially the same era, and that the similarities which we find among different peoples are the result of a likeness in evolutionary materials and forces, and not evidence of a common ancestor; nor will they hereafter submit to being tortured into an explanation consistent with such discarded Adamistic monogenism.

It used to be argued that the various systems of worship in different parts of the world corresponded so closely, both in their evident import and in numerous points of arbitrary resemblance, that they cannot have been struck out independently in the several countries where they have been established, but must have all originated from one common source. The latter part of the argument is good. The error consisted in assuming that the common source must have been geographical, instead of looking for it in the very nature of every individual man, in the general and all important sex instinct.

The practical universality of Ophiolatrea, demonstrates only its evolutionary proximity to the primal sex-worship. The probative force of a general similarity in myths concerning the fall of man, through the seduction of a serpent-tempter, only tends to show the sex-origin of serpent worship, and to illustrate the uniformity of evolution. Sameness in these myths no longer conduces toward their acceptance as different relations of the same historical fact.

There is still another consequence which follows from the subjective origin of religion. It furnishes a new explanation for that, all but, universality of religion. Heretofore this fact, because its relation to the sex-feeling was unrecognized, induced the conviction that religious ideas are innate. Out of this was evolved the notion

about the existence of certain intuitive first principles of which, or through which, because of their supposed origin, we were said to have inherent direct knowledge of God. The subjective and sex-origin of religion explains this universality and alleged innateness, so as to destroy utterly the deduction formerly made as to their infallibility of such testimony in favor of the objective verity of religious concepts.

For the foregoing reasons, among many others, I conclude that religion came into being by ascribing to the sexual mechanism a separate, local intelligence, which, coupled with a misinterpretation of the seeming transcendence of sex-ecstasy, resulted in the apotheosis of sex-functioning, and the sexual organs, and that all the manifold forms of religion are to be accounted for only as the diversified products of evolution, resulting wholly from physical factors and forces, operating upon man under different conditions.

THE RELATION OF CEREBRO-SPINAL FLUID TO EPILEPSY.

BY C. H. HUGHES, M. D.

HOUSE (etiology and pathology of epilepsy major, *Phila. Med. Jour.*, Vol. v., 1900) found in five autopsies, after *status epilepticus* an excess of cerebro-spinal fluid in each, and regards this excess of interventricular fluid as the cause of the convulsions and status. He compares the symptoms of epilepsy with those of other diseases which produce or are accompanied by convulsive seizures resembling more or less the seizures of epilepsy, hysteria, tetany, infantile, puerperal and uremic eclampsia, alcoholism, cerebral hemorrhage, and the apoplectiform and epileptiform convulsions of general paresis. Epileptic seizure, epileptiform paretic convulsion, alcoholic convulsion, or cerebral hemorrhage convulsion present marked similarity. "In the brain of an alcoholic there is an excessive quantity of cerebrospinal fluid, the ventricles are distended, the brain substance drips with fluid, and the membranes are dropsical. This is called the 'wet brain.' In general paresis the ventricles are distended with fluid, there is an increased quantity of fluid in the subdural space, and the whole brain is surrounded with an excessive quantity of turbid cerebrospinal fluid." In these conditions the excessive fluid seems to House to be the logical cause of the symptoms of these diseases, which he regards as pressure caused results.

Besides these necroscopies, House's conclusions are drawn from a large number—approaching three hundred—epileptics, alcoholics and paretics. Bonar, in the December number *Jour. of Ment. and Nev. Dis.*, has, with rare

neurological discrimination, singled out this excellent article for analysis and gives among others the following of House's conclusions:

(2) An increase of cerebrospinal fluid would readily account for the seizures. In many instances it is analogous to the marked increase of fluid in the crania of alcoholics and paretics, and is not dissimilar in clinical effects to the more localized lesions of hemorrhage or abscess.

(3) This fluid, physiologically subject to more or less variation in quantity from day to day, is fully capable of pathologic increase, and from analogy must bear exciting relations to the convulsion.

(4) Its increase is probably gradual, and to this we may ascribe the auræ.

(5) Its absorption probably begins with the third stage of the convulsions (relaxation and coma), and if this fails, repeated convulsions (*status epilepticus*) ensue.

(6) Its superabundance may be due to lymphatic spasm, or to marked disturbance of equilibrium between lymphatic and general circulatory activity, which may be favored by heredity, toxemia, or any of the recognized predisposing causes.

(7) This creed applies to the so-called idiopathic epilepsy, as distinguished from the convulsion of the Jacksonian epilepsy, although even in such cases this condition will help to explain some otherwise unexplained symptoms.

This is an exceedingly plausible conception of epileptic convulsion causation, and one likely to prove quite as acceptable to the neurological mind as the auto-toxicity theory, though the latter need not be cast out beyond the background of a remoter causation of possible toxic vaso-motor paralyzing power producing the interventricular distension and subsequent arteriole contraction in the psycho-motor convulsion areas of the brain.

Doctor Marc Ray Hughes, in a paper read before the Mississippi Valley Medical Association, October 11th, 1905, has called attention to this aspect of the pathology of epilepsy and epileptoid, though he maintains the initial stage to be, as has been of late years generally conceded

and as the present writer has maintained for decades, if not priority, an arteriole vaso-motor spasm from some source of cerebral excitation, probably auto-toxic, with cerebro-pathic predisposition.

Epilepsy is a functional vaso-motor disease, an alternating vaso-motor condition of transitory paresis or paralysis and irritation, the irritation causing contraction of the arteriole supply of the convulsive area involved and the extreme ventricular dilations, caused by excess of cerebro-spinal fluid in them, producing the coma and comatose symptoms.

A trauma or a blood toxine (auto-toxine or chemical, like alcohol, camphor, etc.) or a peripheral irritation, intra or extra intestinal, tapeworm, lumbricoids, fistula in ano, etc., causes first a paralyzing impression on the vaso-motor mechanism of the brain's blood supply or on the heart (cardiac epilepsy) causing the excessive pouring out of the cerebrospinal fluid into the perivascular spaces and ventricles of the brain.

"The cause of the spasmodic paroxysm is also the cause of the removal of the first cause of the epileptic condition, *viz.*: the vaso-motor paresis and consequent pouring out in excess of the interventricular and perivascular space fluid into their natural receptacles in the brain. Whatever condition of the organism may cause first a paresis or paralysis of the vaso-motor mechanism so as to permit excessive filling of the ventricles to the point of such degree of distention as will bring vaso-motor irritation of the brain arterioles, will develop an epileptic or other convulsion.

"A trauma, a toxicity of the blood, a peripheral irritation apparently transmitted from the surface or from an internal organ will do the same (gastric, uterine, rectal, etc.) The recurrency which characterizes epilepsy is due to a peculiar morbid vaso-motor impressibility acquired by frequent repetitions of the cause and by hereditary impressibility.

"No epileptic brain where death came in the status has ever been found with undistended ventricles, and all known causes of epilepsy have produced this state of brain. Inebriety, general paralysis, cephalic traumatism, toxic influence organically generated or taken from the animal, vegetable or mineral kingdom, and psychic influences have produced this state and phenomena, alternating of the vaso-motor nervous system whenever epilepsy or epileptoid symptoms have resulted."

THE ALIENIST ON THE WITNESS STAND.
UNSCIENTIFIC RULING OF THE COURT
IN THE THAW CASE. FALLACY OF
THE LEGAL "KNOWLEDGE OF
RIGHT AND WRONG TEST
OF INSANITY," ETC.

By C. H. HUGHES, M. D.,

St. Louis.

THE singular and unjust contention of Prosecuting Attorney Jerome, and this contention sustained by a ruling of Presiding Justice Fitzgerald, that "*prima facie* evidence of insanity must first be submitted through expert testimony before facts from other sources tending to show insanity can be admitted into the testimony, is, from an expert alienistic standpoint, violative of the just rights of the defense, the rights of psychological science and of experts therein whose need it is, and duty to have all available facts upon which to base a sound judgment on a question of sanity or insanity. The entire life biography of the person supposed to be insane and entitled to the immunity of insanity before the law, is involved in this question, for insanity is a matter of character change and disease.

Another error and injustice to the prisoner suspected of insanity, and to the alienist experts summoned in court to determine if insanity exists, or has existed in the mind of

the accused, is the exclusion of conversations between witnesses and prisoner, as if the oral and verbal symptomatology were not essential to the diagnosis of insanity. Such evidence delivered to a psychological expert during his medical examination is not in the nature of the legal heresay which ought to be ruled out in ordinary questions of evidence, but it may or may not prove symptomatic, like the interrogation of the eye, the ear, the psychic reflexes, the gestures, attitudes, sphygmographic tracings, pulse arterial states, respiration, delusion, etc. Delusion is often revealed by speech and writing, gesture or attitude, etc.

When a possible psychological problem presents to the alienist expert for solution, the expert should have access to every means of enlightening his observation and judgment in behalf of the prisoner and his interests, who is presumed innocent until proven guilty, by reason of crime conceived and executed by a sound and healthy brain and mind, or in behalf of the interests of the commonwealth, if simulation is suspected and sanity a probability.

The prosecuting attorney and the presiding justice in this case, prejudiced the cause of the accused and violated the rights and necessities of psychological expert science by themselves, deciding the vital point that conversations cannot be taken into account in determining mental status before experts had decided, while it is a clinical fact that "by words sounding to folly, much, if not most insanity, is primarily suspected*" and often confirmed, notwithstanding that the actions of the insane, as of the sane, sometimes "speak louder than words."

It is both by speech and action, with objectively demonstrated change of organism affecting the brain and mind, that science endeavors to form its judgment securely in a case of possible mental aberration, facts observed after and before, as well as at the time of apparent crime, or questionable propriety or morality of any kind, to see if it be due to disease or to causes and conditions beyond the legitimate jurisdiction of medical science.

The following extracts from stenographer's report will

*Isaac Ray.

illustrate our contention of the court's error and the injustice done the prisoner and psychiatric science.

Superintendent of the State Hospital for the Insane at Binghampton, N. Y., after outlining his experience as an alienist, said he had visited the defendant in the Tombs six times, the last time October 3.

"On the first visit I talked with him, but did not make a thorough examination. I observed that he was suspicious, reticent and apprehensive. He was fearful that he would be declared insane. After a general conversation I made an arrangement for a future visit, which led to a second examination. On September 19, I went to the Tombs with Dr. Evans, of the insane hospital at Morris Plains, N. J., for the purpose of making a thorough examination.

"What did you observe on this visit?

"Mr. Thaw was brought in, and we had just stated the object of our visit, when Mr. Thaw turned on his heel and abruptly left the room, notwithstanding that it was understood plainly beforehand that we were there to examine him.

Justice Fitzgerald, on motion of District Attorney Jerome, ordered that all of the answers after the words "room," etc., be stricken out.

Mr. Jerome admonished the witness that "no conversations were wanted," and the Court directed him to re-relate only what he observed.

"Without stating any conversation, Doctor, tell us what you observed, asked Mr. Delmas.

"He abruptly left the room.

"Did you observe anything else?

"Yes, I observed more, but it was all in his conversation." (And conversation is a legitimate subject of observation in such an inquiry.)

Mr. Delmas and Mr. Jerome then had a long argument on the law covering the matter of expert testimony.

Mr. Delmas argued that the declaration by Thaw tended to show his state of mind at the time the action complained of was committed, but all he desired from the

witness now on the stand was an opinion as to the defendant's condition at the time of his examination in September. He would ultimately show his condition on June 25, 1905. Several authorities were quoted from.

District Attorney Jerome argued that the mental condition of Thaw at the time of the examination was not material. The only thing that was competent, he said, was testimony to show Thaw's mental condition at the time of the shooting and at the time when his wife told him the stories which the defense claims unhinged his mind.

At the conclusion of the argument, Justice Fitzgerald said he could make no ruling because there was no question pending.

Mr. Delmas then asked Dr. Wagner to go over the details of his second visit, and give the conversations. Mr. Jerome objected and was sustained.

"When did you make your next visit to the prisoner?" asked Mr. Delmas.

"I think it was on September 22, 1906.

State what examination you made.

"The examination consisted of certain questions I asked him and his answers to them.

"You must not give conversations, said Justice Fitzgerald.

"Was there anything else?

"Yes.

"Wait a moment, Doctor, interrupted Mr. Delmas. Were those questions necessary to ascertain the mental condition of the defendant?

"Yes, sir.

"Then please state what those questions were.

JEROME'S OBJECTIONS.

"Did these questions and answers put to the defendant refer to his past mental state or his condition at the time of the examination?

"Both.

"Can you separate the questions and answers as be-

tween past events and his condition at the time of the examination?

"To a certain extent, yes.

"Please state the questions and answers, as to his condition at the time of the examination."

Mr. Jerome objected, and was sustained.

"Well, doctor, what did you observe or what did you do?

"We took Mr. Thaw to where the light was strong. He watched us closely and would not be placed in such a position where he could not have seen both Dr. Evans and myself under his eye all the time. We asked him certain questions as to his life history, etc.

"What were your scientific deductions as to the man's mind?"

Mr. Jerome objected, saying the examination had not gone far enough for that, and was sustained.

"You put to him certain questions and received certain answers; was that all?

"As I remember it, that was all.

"When did you next examine Thaw?

"The next examination was on Sept. 27, and was in part a continuation of the previous one. Dr. Evans and I then took up the physical examination.

"What did it consist of?

PHYSICAL EXAMINATION.

"The color of the hair, the general contour of the head, the expression of the eye, the condition of the heart, the reflexes and the state of the pulse. The matter was carried on in much detail. At the end of an hour the patient was exhausted and we deferred further examination.

"When was the next examination?

"On October 3. We went over some of the ground of the former physical examination and also went into the history of the case, and the family history. This examination also lasted an hour.

The final examination was made October 8. We re-

viewed the proceedings of previous examinations and went into this story of the case in more detail, including the events of June 25th. This examination lasted for an hour and a half.

"Doctor, from your examinations during six visits, could you form an opinion of the then mental condition of Mr. Thaw.

"Yes.

"Did it enable you to form an opinion of his mental condition on June 25?

"Yes.

"What was that opinion?"

At this point Mr. Jerome objected and confused the witness, and made him say that his opinion was based on hearsay, the doctor doubtless referring to what he had heard from Thaw, and to what had entered his mind in addition to what he had elicited from personal examination, he evidently not being able at the time to say, what was probably the fact, that he made his opinion from what he had obtained by his examination, and what he had heard not in evidence only confirmed.

"Doctor, your opinion," he said, "is based partly on what you observed and partly on hearsay and the family history, is it not? Your opinion as to Thaw's sanity is part based on matters not in evidence, is it not?

"Yes.

"To a considerable extent, is it not?

"Yes.

"As a matter of fact then, Doctor, you could not state an opinion after excluding the hearsay facts that were stated to you, as to this man's history, etc?

"No, sir.

"Then I submit, Your Honor," began the District Attorney, but he was interrupted by Mr. Delmas, who said he would withdraw the question and frame a hypothetical one.

In the meantime he asked that something be done to relieve the atmospheric condition in the courtroom, which, he declared, was oppressive. Justice Fitzgerald declared

a five minutes' recess. All left the room and the windows and doors were thrown open.

Thaw whispered with his counsel and laughed merrily while leaving.

The whole proceeding shows the wrong and the judicial fallacy of putting alienist experts on the stand to pronounce on a case of insanity when the facts are not all in, and proven before the question is put, or not assumed and offered to be proven from the evidence.

When and where life and liberty hang upon the possibility of a delusion to be proven, a false judgment of the mind and the mind itself probably diseased, the conversations of the party under examination for insanity, though not germane to any other thing in the trial or to any logical premise in the cause at issue, as laid down by counsel, may reveal to the psychological expert the true nature of the mind under inquiry, whether morbid or otherwise, and these conversations may relate to matters otherwise irrelevant, except as the expert may need them as a basis on which to form a conclusion as to the mental status of the party under arraignment.

The mind, through speech or song or pen, reveals its soundness and accuracy of psychic tone, as a musical instrument does its capacity for harmonious sound, and the expert musician tests the musical instrument in a manner peculiar to the exactions and suggestions of his special skill and knowledge of the instrument's aptitude, capacity and power, and he does it by touching the keys or strings or otherwise sounding the notes of harmony or discord. He examines the instrument in his own way to find out if it is normal in tone and tune, like the normal, well-ordered mind, or whether it jangles out of tune and harsh, or even sweetly, but inharmoniously sweet, like the disease-disordered mind may do.

And he is allowed his own way about the method of examination to test its real condition and value. He may even ask who made it, and how and when and where. How long it has been put in service, and what manner and extent of service it may have been subjected to, and he may

examine the sounding board, if it be a piano, and test each individual string in its own way, as well as keys and pedals, stops or attachments, if it be an organ. He is permitted, as an expert on musical instruments, to know of its remotest heredity with the the piano or violin, if it be a Chickering or Stradivarius origin. No honest person who might wish to get at a correct knowledge of the real condition and value of such an instrument, would put obstacles in the way of its true condition and worth being discovered.

In the Thaw trial, testimony as to a peculiar will made by Thaw, and whose peculiar nature in its singular provisions as the defense maintained, would show a state of unsoundness of mind no more remote than at the time of Thaw's marriage to his present wife (Evelyn Nesbit Thaw) in 1905, was objected to, and the objection was sustained by the court, though these facts, and the story of Evelyn Thaw's seduction were subsequently admitted. They should have been allowed to go to the expert in the hypothetical case in the beginning, as proper material on which to base a diagnosis of the sanity or insanity of Thaw. Everything in word or act that may throw possible light on symptoms of mental disease should be germane in an inquiry as to insanity or feigning insanity.

The court in this peculiar procedure, to the mind of an alienist expert, even decided before the trial was half way through, not in fact more than fairly on its way, so far as the examination of witnesses were concerned, before the defense had time to develop the possible insanity side of its case, and after ruling out essential facts and requiring medical experts to be sworn before important facts needed by them upon which to decide the mental question, were brought out, declared the insanity plea was not established, as if a possibly insane man has no rights to evidence of his insanity that a court is bound to respect, especially where the possible malodorous or immoral reputation of a party not on trial must be protected.

The will, showing as it did psychoasthenic dread of assassination and real or delusioned belief that his wife's

life was in danger of death or drugging and his belief, real or imaginary, that his wife and other women friends had been grievously wronged, his singular financial provision for these really or falsely (delusionally) believed wronged women, show either a real moriphobic dread or a feigned fear of death, and should all have been promptly submitted to the opinion witness.

Under the dominance of a morbid imperative conception, the psychic offspring of his thanatophobia, he could not wait even till a day after his singular marriage might be consummated before making this peculiar will. The haste in the making, and all the circumstances connected with the execution of of this singular testament, which ought not, in the prisoner's interest, to have been ruled out, as it was at first, even though the name of Stanford White might have had to be excluded, were essential to the full force and value of the medico-legal testimony, in *his* interest and *due* him, as a possible insane man, at the mercy of the court and in justice, right and law demanding the court's protection. For "municipal law," according to that high authority that to this day guides, or should direct and bind the ruling of courts and the deliverances of juries, is "a rule of action, prescribed by the supreme power in a state, commanding what is right and prohibiting what is wrong." It is better that many criminals should go free by the rulings of justice tempered with mercy, than that by harsh, unmerciful, judicial deliverance of a court with power over life and death, an innocent man should be punished for an apparent crime of disease-impelled fatal violence.

In this Thaw trial, words of judicial wisdom, tempered with merciful consideration for a possibly insane prisoner, should from the beginning, have dropped from the bench "like the gentle rain upon the place beneath," in behalf of the just rights of the hapless prisoner who sat in his place, apparently already condemned by the court in the beginning of the trial. For it said thus early in the trial, and in the presence of the listening jury, "Thaw's insanity is not established," as if it were in the legitimate and morally right province of the court to make a medico-

psychological diagnosis in lieu of the medical experts. As if it were within the province of a judge to decide so important a question as that of insanity on what he, a non-medical man, unauthorized by law to settle medical questions, might decide as germane psychic symptomatology in a medical question, before even the experts had the evidence they were seeking through the Judge's exclusion by unjust assumption of superior diagnostic judgment, from them.

The discrediting, by confusing cross examination of witnesses in medico-legal cases, who assume an expert knowledge of psychiatry which they do not possess, who have had none of that clinical experience which is, as Esquirol pronounced so long ago, essential to the forming of a correct judgment on the subject, by confusing and often irrelevant cross examination, hurts the cause of a really insane person. This is legitimate in legal cross examination, and ought to deter medical men without expert psychiatric knowledge, from assuming to know what they do not know on this often intricate subject. But egotistical "smart Alex's" are in the medical as they are in the legal profession, ready to damage a good cause by a display of self-conceit, in lieu of knowledge and real skill. Exaggerated egotism may be found in any profession, not alone among insanity experts, as ample illustrations confirm among lawyers, and as it is sometimes found on the bench.

But when a medical man possesses real knowledge of facts tending to show disease of the brain developing insanity, he should testify to the facts as facts, being careful not to pose as a psychologic expert, and cautious as to the assumption of general psychological expert knowledge, unless he possesses the latter knowledge. The circulation of the brain's blood with insomnia and psychically disordered function, taken in connection with symptoms of mind change and perversion, may justify a personal conviction as to the mental state of an individual, seen and treated, without justifying the assumption of general expertness in determining the existence or non-existence of insanity in general.

The testimony of Dr. Wiley, in the Thaw trial, as his own fact of observation was valuable as to the existence of chorea, showing disturbance (instability) of the nervous system of Thaw in childhood, and his testimony as to Thaw's impulsive moods displayed in the opening and closing of a street car window on a certain occasion, the family history, etc., were facts which were worth something, added to other similar facts throughout Thaw's life. They were worth something to an opinion witness in making up an estimate of insanity predisposing presumption of neurotic instability, but the assumption by Dr. Wiley of being an authority in psychiatry, was as much a mistake, as some of the cross questions of the prosecuting attorney were malapropos and damaging to his cause, as showing the animus and motive of the prosecution to win, whether his cause was just or not, as well as his fear of the possible effect of Dr. Wiley's testimony on the jury, making it appear necessary to totally destroy the psychic influence of the physician's evidence. "As mild a mannered man as ever scuttled a ship or cut a throat" in a pirate, would better have become Mr. Jerome in his handling of the experts, and better promoted his cause, such for example, as the purely neurological, and not at all psychological questions asked Wiley, for they had nothing to do with mental states, viz: The question as to the Kratch-Romberg and Argyll-Robertson signs, etc. They pertain to neurology as distinguished from psychiatry, though every alienist now-a-days ought to know about them. Nevertheless, the older alienists, who were good diagnosticians of insanity knew nothing about these strictly spinal cord neurodiagnostic tests. As well ask an alienist the malapropos question as to what is the virile, or genesic or cremasteric reflex, the knee, toe and foot reflexes, etc. These are concerned in the diagnosis of states of the spinal cord, while insanity is a disease in which the brain is chiefly involved, the spinal cord being far more often intact than otherwise in mental aberration, though spinal and cerebral diseases may coexist as in the rare insanity of cerebro-spinal sclerosis. There were, as I

have said, great alienists who could clearly diagnosticate insanity before this modern symptomatology of the spinal cord was discovered, and not so long ago, either. It is not far back to Marshall Hall, Brown Sequard, Claude Bernard and Sequin and their colleagues nor to Van der Kolk, Griessinger, Bucknill, Luke, Ray and others of their day.

But assumption of overmuch knowledge in a medical man is a mistake, and may prove as harmful as too much acerbity of temper and vehemence may be to an attorney's examination, as was displayed by the tempestuous, brilliant, violent, incisive Boanerges of the prosecution in the Thaw case, especially in the earlier days thereof.

To claim expertness in psychiatry when one is not thoroughly informed, recalls the "word or two of advice" which Dr. Isaac Ray, in the very first edition of his great work on forensic psychiatry, deemed it necessary to give medical men summoned to testify as alienist experts in court. "Let him beware," this skilled clinician and expert in psychiatry said, "how he suffers the dread of being thought ignorant of his profession to draw from him a positive and unqualified reply, where a modest doubt would better express the extent of his knowledge."

In this connection, and in relation to the Thaw case, Ray's sound injunction to the alienist opinion witness as to returning categorical answers, should be heeded whenever necessary to make plain, unequivocal and not misleading his meaning in answer to the questions of counsel. "He must," he says, referring to the expert's answers, "in spite of the authoritative demand for a *yes* or a *no*, so qualify and explain his answers, as to prevent any mistake of their meaning, and no dread of amplification should deter him from this purpose. Let him bear in mind that he has unquestionably a right to express his opinion in his own way. He is put upon the stand to answer, not solely such questions as the ingenuity of counsel may prompt to further their ends, but to give an opinion on a scientific subject for the purpose of promoting the cause of justice." And to this it may be added that no class of experts are

more subjected in our courts to this same sort of harrasing, inappropriate and often insolent questioning by lawyers as medical opinion experts.

To satisfactorily establish even the presumption of insanity or to indubitably controvert it, the biography of a life with its environmental influences has often to be brought out. Even those otherwise unaccountable outbursts of psychokinesia or temporary insane displays, in some instances termed mania transitoria, kleptomania, emotional insanity, or epileptic unconscious automatisms or psychic epilepsias and morbid fulminations of passion and impulse, often require long antecedent or subsequent histories to prove or disprove their real morbid nature. Their study often requires patient and thorough investigation and cautious judgment in the examination of circumstances, which to the non-expert mind and even to presiding judges, who may consider the true nature of insanity so simple always as to be within judicial ken, may seem irrelevant and of so little significance as to be fit only to be ruled out from the summing up of circumstances and symptoms.

If correct diagnosis of insanity, even of mania transitoria and all psychokinesias is like the examination of the apparently strong rope or chain or brace that suddenly breaks under even ordinary strain, because of the previously long persisting strain and long wearing, thinning, rusting or otherwise weakening of the threads or links, requires a knowledge of the life of the rope or chain and the influence of the environing elements and strain upon it or them to account for how and when the weakness may have developed, and to prove that the break was an unavoidable occurrence or an unwarranted fact, for which the manufacturer of the rope or chain or brace could be held responsible because of flaw in manufacture or carelessness, ignorance or design, how much more important it is to know all about the life of a brain and mind supposed to have broken and departed from normal psychic integrity?

The insidious, predisposing, developing and culminating

causes of brain break, as well as conditions confirmatory after the fact, should all enter, and be allowed by courts to enter into the psychological analysis and expert judgment. To establish possible insanity, or to prove soundness of mind, one should be unhampered in symptomatic fact or logical resource.

A physician neurologist and alienist, inquiring into the existence previous to an outburst of mania, of a neurotic skin disease, an angioneurosis, for instance, or an urticaria, would appear exceedingly illogical to a judge like his honor on the bench in the Thaw trial, perhaps. His judicial excellency might even regard such an expert as a little off himself in his mental makeup, or he might, like a certain English judge well known to forensic psychiatry, think such a physician had better be with his patients. But the judiciary has learned much from clinical psychiatry and is destined to learn yet more from modern alienism, to the advantage and welfare of mankind since that *obiter dictum*.

But what does the ordinary judge of the criminal court now know of the vasomotor neuroses, and of their relation and precedence often, to those actual cerebral hyperaemias, due to lesion of the vasomotor nervous mechanism of the brain, which cause homicidal impulses, vertigos and apoplexies?

Judges who decide peremptorily on the proof or absence of proof, or upon the needful elements of a proof or disproof in a case of possible mental aberration should concede more to the needs of psycho-scientific inquiry than has been displayed in the Thaw trial concerning the question of insanity.

The many startling and disastrous outbreak culminations of a slowly invading brain disease, prodromal to marked insanity, which daily come to our knowledge, like the sudden paralysis of heart or brain of precedent nervous exhaustion cause that astonish the public, have their origin usually in long previously developing morbid conditions, many of which, if timely appreciated and treated could be averted or long postponed.

A married man, a thrifty gardener, goes to bed and sleeps calmly, but is awakened in the early morning, his wife standing over him and about to cut his throat with a butcher knife brought from the kitchen, where she has burned the hoarded savings of many years of industry. A few days and she is dead of cerebral hemorrhage, the result of a far back atheroma and hyperaemia ending in arteriole rupture and sanguine extravasation into the ventricles of the brain, and yet she had had no previous inquiry into, or treatment of, her predisposing long developing vascular disease of the brain that caused these insane impulses. Conditions that develop sudden mortal brain or heart diseases are often of slow development as are the predisposing conditions of sudden heart paralysis.

The autopsy in this case of insanity explained all, as it has done in regard to other insane persons similarly afflicted, but executed for irresponsible homicide. Legal ruling out of testimony necessary to form an expert judgment on a question of mental aberration, though not otherwise germane to the cause before the court, is a judicial crime against a possible helpless creature who should have the court's strongest help, and is therefore a crime against the dictates of humanity and justice.

"In this country the course usually adopted for eliciting the opinion of the expert, is to ask him if he has heard the evidence, and if he has, and supposing it to be true, what is his opinion respecting the mental condition of the party."*

The medical experts "are not," continues Dr. Ray, quoting from a decision of the court in *Commonwealth vs. Rogers*, 7 Metcalf, 500, "to judge of the credit of witnesses or of the truth of the facts thus testified by others. It is for the jury to decide whether such facts are satisfactorily proved. In other courts the hypothetical case is substituted for the submission of testimony and assuming the statements set forth in the hypothetical case, which is presumed to be built upon the evidence, to be true, he gives

*I. Ray, *Medical Jurisprudence of Insanity*, chapter xxix., subject, "Duties of Medical Witnesses."

his opinion, and the jury decides whether the hypothesis is true or not and determines what credibility is to be given to the expert witness."

But it is common now for attorneys to object to the statement of the hypothetical case, if they think the assumed facts stated are not in the evidence, and the writer has often seen hypothetical cases of supposed insanity amended and patched and shorn under such objection from the opposing counsel. In a recent will case in Illinois one hypothesis was submitted after a day or two of legal contentions, to the experts of either side, the presiding judge assisting in its construction.

But in the Thaw case how variant and peculiar the judge's rulings. The defense must first lay its foundation in the testimony of its experts, who, instead of this restricted ruling should be entitled to all the evidence to be had from both prosecution and defense, in addition to their own personal examination, in order to form a complete opinion. The value of the expert opinion to the jury is in the effect the whole testimony added to the special expert examination, which yields him certain direct personal evidence, has upon the mind of the expert specially familiar by long study with the intricate question of insanity.

Under the presiding judge's ruling in the Thaw case the defense was forced in the beginning to put its experts on the stand without all the evidence, without all the facts available in the prosecution's testimony and in the conduct of the prisoner himself during the trial, facts which they should be entitled to have, if they want them, for insanity may be established by reasoning from evidence both *a posteriori* as well as *a priori*, and at the time when and whence the date of the accusation or contention begins. The supposed insane man's conduct and speech during the trial, if he be living, may be valuable symptoms for or against a hypothesis of mental disease.

With the correct dictum of Ray before us we should always insist upon having all available facts in the testimony, before giving a final and irrevocable opinion, for it is a fact that must never be forgotten, as this wise and

learned alienist expert author states at the conclusion of one of his best chapters, "that the phenomena of insanity do not lie on the surface, any more than those of other diseases, but oftentimes can be discovered only by means of patient, close examination*."

Being lead to give direct categorical answers in the Thaw trial when they were not necessary to the truth, some of the experts placed themselves in an incorrect position as to the lawful source of the foundation for their opinion. An expert who had formed his opinion from personal examination of act, speech, etc., to the question, "Your opinion doctor is made up from all you have seen and heard in this case?" Answer Yes. Whereas some of them might properly say their opinion was made up from personal examination and interrogation of the prisoner "and fortified, but not changed by facts not yet in evidence, of which I have become personally cognizant and which I now detail to you under oath from my personal experience and observation."

And here comes in the very manifest injustice to the accused. The medical experts are required to go on the stand in the beginning, instead of at the close of the testimony and give an expert opinion "to lay a foundation" as the judge ruled; with only a part of the facts before them based upon a necessarily lame hypothetical case and their personal examination, whereas personal medical examination should go in as direct testimony whether given by an assumed psychological expert or by a plain general practitioner.

An expert in psychiatry, who has never seen a given case of possible insanity, might often form a better conclusion from a completed symptomatic biography of an individual described through a number of years or months or days by medical men and laymen, with a full record of the life, character or characteristics of the accused for comparison, than by a single or even two or three personal examinations without the life history. For "unlike the ordinary witness who relates only what comes within cognizance of his own

*Conclusion of Section II Partial Intellectual Mania.

senses, the expert testifies respecting the inferences that may be drawn from the facts related by others" (Ray's Medical Jurisprudence of Insanity, subject: Duties of Medical Witnesses) "in addition to any personal examination he may have opportunity to make." How strange then that medical experts should be expected to give an expert opinion, in any case, without being first given an opportunity to consider all of the facts?

A medical witness (Dr. John T. Demar, of Killaning, Pa.) was put on the stand by the defense to show the mental condition of John Ross, a cousin of Harry Thaw. The court sustained the prosecutor's objection and the witness was excused. Now neuropathic defect in collateral line of blood and brain is valuable in sustaining an hypothesis of hereditary mental instability.

In making up an expert judgment on a question of insanity, every collateral stream or ebullition or ancestral possible fountain of psychopathic or allied neuropathic taint is germane to the subject of a probable insane latent taint predisposing to an outbreak of positive insanity under certain exciting influences. It is proper to ascertain and weigh all of the organic predisposing aptitudes in the family tree to account for and confirm the verity of the present patent facts, and fence against the supposition of simulation, in making up the judgment.

The early biased attitude of Presiding Justice Fitzgerald in this and many other instances where the objections of District Attorney Jerome were almost invariably sustained against the plea of insanity, would suggest the summoning of an *amicus curiae* alienist expert, who might help the cause of justice and humanity in such trials. Expert observers and judges of insanity know that hereditary transmission of neuropathic and psychopathic taints can be found either in positive and readily recognized mental aberration, or in neuropathic or psychoneuropathic instability of nerve center element and tendencies to morbid psychokinesias out of harmony with the normal, psychic neurone center organization and environment. "The parents have eaten sour grapes and the children's teeth are set on edge,"

is a homely suggestion from holy writ philosophy as trite as the saying, "as the twig is bent the tree is inclined"—plain and suggestive enough for the understanding of the attorney or judge non-expert in morbid psychology. As well expect "figs of thistles or grapes of thorns" as to look for great, well balanced stability of mind, in the germinally weakened psychoneurotic individual at the time of highest mental maturity and fruition, when he has been sent into the world by a congenitally neuropathic fate he has had no part in predetermining.

To expect a weak tree, weak from unhealthy seed, improper soil and untrained growth to withstand the environing storms and stress like inherently stronger trees is not reasonable even to the mind of an arboriculturist. Nor does an alienist expect more of an inherently weakened and unprotected and untrained neuromental organism at maturity. A psychoneurotic organism damaged and neuropathically unstable from the ovum, maybe nourished improperly and badly environed for the promotion of brain stability during all its way from the cradle and kindergarten school and other surroundings, to a precocious and psychically unstable and explosive manhood. For this way lies psychopathic organic propensity, paranoid evolution and paranoiac culmination.

The New York knowledge of a right and wrong legal test of insanity, as expounded in the Thaw case, contravenes true psychopathic science in many of its most important features, as in forms of hysteric insanity, certain phases of psychic epileptic insanity, and in the morbid psychokinesias, and psychlampsias generally. Homicidal maniacs do not all have delusions on the subject of killing. These resistless impulsions, with knowledge of the wrong, are described in the literature of psychiatry and have come within the writers personal observation. Morbid impulsions are far from being derived from this sort of knowledge, and it is as absurd to hold the brain diseased psychokinesiatic or psychlampsic responsible for a disease impelled killing as it would be to hold an epileptic guilty of his spasms.

But the blunders of lawmakers, confidently acting without

warrant of practical knowledge within the domain of psychopathy, if not the result of misleading, inadequately experienced medical counsel, are often the result of unpardonable exaggerated egotism, lacking the mantle of morbidity in its possessors, to extenuate their fatal errors of conclusion, formulated into wrong statutory enactment; the effect of which may be and often is, judicial murder of the innocent mentally disease dominated, without normal minds and wills to control and keep them within the line of the law's inhibition. Insanity is often more than a lesion of the powers of perception of right and wrong.

Insanity is often more and often less than a marked lesion of the intellectual perceptions of right and wrong. The intellect often largely escapes very apparent involvement in disorder, though the intellect is generally, in a manner, insidiously undermined in insanity, especially when this peculiar disease attacks chiefly and dominates the emotions, the propensities, the passions or the will, as in the insanities of the affective life, in melancholia, hypochondria, *folie raisonnante*, etc.

The building of the brain, which the mind inhabits, may be partly damaged or totally destroyed in insanity, as the house may be in which our bodies reside, and the mind acts differently as the body does, according to the perfections or imperfections of its tenement. The tenant and the tenement in both instances are mutually dependent. They each generally reflect the condition of the other, for insanity is a psychic disease of the brain and may appear in various forms and degrees according to the extent and location of the brain's involvement in disease. Hence the absurdity of limiting insanity to that kind of cerebropsychic disease that destroys the knowledge of right and wrong excluding the brain-diseased impulse and the brain-damaged inability to resist the impulse of disease even though conscious of its wrong.

Another violence to psychopathic science in this remarkable trial was in the limiting of the diagnosis of the defense's medical witnesses to insanity up to the date of the homicide and not allowing them to go further with the

diagnosis and then summoning a commission of inquiry of two layman and one medical man to decide as to insanity or sanity after the fact. If insanity is a disease, it is a medical question, to be decided by medical methods and by medical men. It would be almost as absurd to arrest a surgeon in a saving operation, turn his case over to lay nurses and tell him he had gone far enough, as to stop the physicians at a certain point and turn the case over to a *commissio de lunatico inquirendo*, composed of a two-thirds majority of non-medical men, and say, as was in effect said in the Thaw case, "the medical expert testimony has gone far enough for our purpose." With their idea of the first part of the case we will now decide the other end of the man's mental status, with expert laymen and a doctor to look on. First the medical view up to the point of killing, then the layman's view of the mind of the man now. If the medical men of New York have the influence they should have in such matters they should see to it that this insane commission law is changed so that only medical men shall be on the states' lunacy commission. The rights of the insane, the rights of the community and due respect for the medical profession demand that only a medical commission should decide a medical question.

To be Continued.

PSYCHOLOGICAL STUDIES OF MAN'S MORAL EVOLUTION.*

THE CREEPING SERPENT IN OUR GARDEN OF EDEN.

By ALBERT S. ASHMEAD, M. D.,

NEW YORK.

THE entire Semitic race, according to Hebrew tradition, sprung from Shem, one of the three sons of Noah, and from Ham and Japhet came the remainder of the human population. Another tradition says that earlier, the sons of Adam came to the plain of Shena or Babylon, and there burnt bricks and built the Tower of Babel. Babylon, it is thought, was the original home of the Semitic race, and that from the valley of the Tigris and Euphrates, one Semitic tribe after another, Assyrians, Phoenicians, the Aramaeans, Hebrews and Syrians abandoned their birthplace, while the Arabs, the largest branch, always stayed there. Archaeologists believe that the original first home of the Semitics was in some other place. The earliest Mesopotamic ruins show that cities flourished there 6,000 years ago, which were not Semitic. They were besieged, doubtless, by Semites, whose inscriptions show that it occurred 4000 B. C. These inscriptions show writings by means of wedges, closely resembling the Hebrew. The Semites were the besiegers who adopted the earlier settler's civilization and religion. Accepted chronology by Biblical scholars shows that the world was created 4004 B. C. This is about the date when the Semites appeared on this part of the earth.

The earliest character in Semitic history is Sar-

*Continued from May, 1907.

gon, 3800 B. C. Semitic tablets there are still earlier showing that Semites were there still earlier many centuries. Moses appeared 2500 years later than Sargon. These earliest Semites were savages, like American Indians. These earliest Semites adopted the civilization which they found and learned to build houses of adobe like of Mayan civilization. They built them of mud-bricks. The housewife's oven 6000 years ago was called, as modern Arabs still call it, "*tennur*." They irrigated plains, dug wells, etc. Public baths were in vogue 6000 years ago. They worked gold and bronze, engraved and sculptured; made statues, etc. They were agriculturists, raised crops of barley, sesame and cotton. The potter's art was known. They understood weaving 6000 years ago, like Mayans. They knew saltpetre. They were wanderers over the face of the earth, like Jews of today. They lived by trade rather than by labor. These qualities of Jews and Arabs were the same then as they are today; in 6000 years they wandered from barbarism into the valley of the Tigris and Euphrates. Nobody knows where they came from.

In the ancient language of the Hindoos, the Sanscrit, which is now a dead language for 2200 years, the magnet was called "the precious stone beloved of iron." The Talmud speaks of it as "the stone of attraction," and it is alluded to in early Hebrew prayers as *Kalamitah*, the same name as is given to it by the Greeks; from the reed upon which the compass floats on the water in a cup or shell. The Phoenicians knew the magnet. At the prow of their vessels (they were great navigators) stood the figure of a woman (Astarte) holding a cross in one hand and pointing the way with the other; the cross represented the compass, which was a magnetized needle, floating in water crosswise upon a piece of reed or wood. The cross thus became the coat of arms of the Phoenicians. The magnet was called the "stone of Hercules". Hercules was the patron divinity of the Phoenicians. The Phoenicians colonized on the shores of the Mediterranean, according to Plato. From the Phoenicians the magnet passed to the

Hindoos, and from these to the Chinese. In the year 2700 B. C., the Emperor Wang-ti placed a magnetic figure with an extended arm (like the Phoenicians used) on the front of carriages, the arm always turning and pointing to the south, which the Chinese regarded as the principal pole. (Goodrich's Columbus). All nations have connected the compass in the earliest knowledge of it, with the load-stone. Wherever it was used; it is associated with regions where Heracleian myths prevailed. (Lapis Heracleus). "Lodemanager," in Skinner's Etymology, is the word for the price paid to a pilot. Whether the famous and afterwards deified Mariner (Hercules) had a compass or not, we can hardly regard the association of his name with so many monuments as accidental.

The needle of the Hercules cup, as the compass was called, was an "oracle" affecting vividly the minds of all people as pointing to the north. It thus would be symbolized in their works of art. Greek mythology tells us that when Hercules sailed to the island of Eythia, in the Atlantic, he borrowed the cup of Helios, with which he was accustomed to sail every night. This magnetic cup was used for night sailing. A sea shell was used to hold the water upon which the needle floated.

Upon ancient coins of Tyre a sea shell is represented, also two pillars of Hercules, supposed to be placed at the mouth of the Mediterranean, and the tree of life or knowledge with the serpent twined around it, connected as in Genesis. These were Phoenician coins. In Maya countries of Central America upon the reverse side of coins, there is represented a serpent coiled around a fruit tree. The first God of Mayans (Legends of the Phoenicians) Ouranus, devised a person contriving stones, that moved as having life, which was supposed to fall from heaven. These were probably load stones, from which was devised the mariner's compass. Mayan priests foretell future events by a stick in a bowl of water, whose point turns according to their will. This is incomprehensible, unless it is loaded or magnetized. The reclining statue of Chac-Mol, in Mayan countries, holds a bowl on its breast. Divination was

Etruscan. The Etruscans set their temple of worship, as did Egyptians, and ancient Mexicans and Mound Builders of America, squarely with the points of the compass. The Romans and Persians (Fire-worshippers and workers in iron-ore) called the line of axis of the globe *Cardo*, and it was to *Cardo* the needle pointed. Now, "Cardo" was the name of the mountain on which the human race took refuge from the deluge—the primitive geographic point for the countries which were the "cradle of the human race." (Urquhart's "Pillars of Hercules.>"). From this comes our word, "Cardinal," as the Cardinal points.

The compass, or magnetic needle or Hercules pillars, were objects of worship in earliest Phoenician and Mayan times. They represented power over the action of man. Mr. Teoberto Maler has written me from Ticul, Yucatan, as follows: "Without any doubt the snake, principally the snake head (sometimes treated naturally, sometimes in a phantastic manner, with infinite variety) forms the principal element of decoration in Maya architecture. This alone would not be sufficient to establish a relationship (*Verwandtschaft*) with the architecture of the Naga tribes (*dasyu*), pre-buddhistic snake and tree worshippers; if it were not for the fact that Maya architecture also has some very remarkable resemblances with ancient Hindoostan (pre-Aryan) attributable to the *Dasyu* (Naga, etc., Sanscrit), perhaps to be counted with the Georgian, Hittite, Thibetian race) and even perhaps to the Dravidean style (Telanga, etc., probably of Turanian, Mongolian, Turkish origin.) For instance, the Maya triangular arch is the same as the arch in ancient times throughout Hindostan; and the triangular decoration of the west facade of the Eastern palace of "Las Monjas" at Uxmal recalls ancient Hindu wooden structures in use, for instance in Kashmir bridges, till our days.

It would therefore be interesting to compare the Maya language with that of the Naga tribes, and also with the Turanian languages of the Dravida.

The word Naga is applied in Hindu mythology to a deified serpent. The Naga tribe went naked. *Dasyu*

means hairy. The Hittites were Hamites. Hamitic art flourished 1000 B. C., in Asia Minor and Syria: rock sculptures and ruins of sanctuaries. It was Oriental, like that of Mesopotamia and Persia, and very similar to Phoenician or Mayan.

Sanscrit applies to the language and not to the script. Sanscrit is one of the oldest of languages, while its script, or vehicle, or its "alphabet," Deva-Nagari, is of more modern origin. *Deva* means "bright," as applied to the power of a God. The Nagari "alphabets" of India are an important group of indigenous vernacular "alphabets." This was long anterior to the alpha-beta method of expressing thought. A language, the word of mouth or the tongue of a people, then was recorded through its vehicle, the Naga, *the serpent*, or "alphabet." When the serpent "spoke," it was meant that it was written.

Dravida was a geographical situation of Southern India. Dravidic means one belonging to the pre-Aryan race and stock of the Deccan.

Fifty million people speak the Dravidic tongue. They are non-Aryans; no one knows where they belong. Some think them Ural-Altaic.

Mayans did not believe that the souls of the dead all went to one place. Three different places were provided for them, according to the manner of their death. Men killed in battle, as well as prisoners immolated on the sacrificial stone, and women who had died in childbirth entered heaven, the house of the Sun; and it was the duty of the former to accompany the luminary from its rising to the zenith with merry dances, while the latter received it at its Zenith and escorted it down to its setting. The multitude of those who died in their beds of various diseases, entered into everlasting rest, into Mietlan, the kingdom of darkness and shadows, which was supposed to be situated deep down in the earth and in the North, and from which there was no return or escape. But those who had encountered death through Tlaloc, the God of the Mountains, of rain and storms, entered into the Kingdom of that God, which was situated at the top of a mountain, a region

of everlasting coolness, where everything grew and sprouted, where fruits of all kinds existed in abundance, a kind of earthly paradise. These were not burned like other dead, but were buried in the ground (interred.) But those considered as killed by Tlaloc were not only the victims of thunderbolts and the drowned, but also those who had died of gouty, rheumatic or feverish diseases, and those who had succumbed to infectious diseases, etc.

They believed in a Garden of Eden. To the rain-god on whose favorable or adverse disposition so much depends in the life of the poor natives, toiling on the glebe, and living on the products of the fields, a great number of holidays were consecrated in the course of time. He was plied with sacrifices to obtain from him fair weather for the crops. Besides that, every eighth year, in the Autumn on a day specially appointed every time, a festival was celebrated under the names *atamalqualiztli* ("the eating of water-fritters;") *ixnextinaya* ("where one gets means;") *atecocoltinaya* ("where the shell-horn is blown") and which centered also in Tlaloc, the rain-god. During that feast a severe fasting was kept up; only water-cracknel was eaten, prepared with Maize mixed with water, to which no salt nor capsicum was added; the Maize was not previously softened by boiling it with quick-lime. The people said that by that feast they meant to give rest to the victuals, that is the products of the fields which had been harried during the last eight years, by being treated with salt, with pungent pepper, with soda-salt earth, and by being cooked with quick-lime, and that they would thus gain new life.

It was quite natural that Tlaloc, the rain-god, should be the centre of such a feast. He appeared, but not alone; with him all the Gods of the Mayas, that is persons in the garb of divinities, performed a dance. There appeared besides, various characters more or less closely related to Tlaloc. The most remarkable part in this festivity was played by certain actors (or shall we say artists?) who, it would seem belonged to a peculiar people, or at least came from a peculiar village, as they went by the special name

of *Mecate ca* ("those from the stag-land.") These men seized with their teeth snakes and other reptiles preserved in a vase full of water, danced about with them in their mouth, and finally swallowed them alive. This Mayan feast, offers a curious parallel to the celebrated snake-dance of the Hopi or Moqui Indians of Arizona.

The worship of the snake was natural to all early Man, especially in his naked and hairy days, as it was a survival of the reptilian age. The worship of the turtle of Hawaii and Japan, belongs to the same idea. Religion and these reptiles were inseparably connected, as was the crocodile in Egypt. The snake represented power. In our own Southwest in the Navajos Indian regions, among the Snake Indians, snake dances are still in vogue, which are religious observances. Thus the eating of the snakes in the religious ceremonials of Mayans, was in strict keeping with the religious observances handed down probably to the Pueblos, Navajos and Zunis. All pictographs in Ancient America, on rock and sand (earth) were really chants to the deities. They implied voices, or speech, prayers, etc. These were very elaborate, and fashioned with exceeding care and ceremony, immediately preceding the observance of the specific religious rites. Some were curative or "betterment" ceremonials of priests. "Prayer Meal" (Earth) was used on the "Pathway of Life," symbolical of mortal things.

Sacramental things were represented on the four cardinal points of the compass, North, South, East and West walls of something. The Navajos imitated these ceremonies from the Pueblos. Skin paintings among the Navajos and Pueblos, are supposed to be spiritually shadowed, or breathed upon by the gods or god animals they represent, the snake was one of these last. The paint substance, therefore, is in a way incarnate and at the end of the ceremony, the animal must be killed and disposed of as dead if evil, eaten as medicine if good. This is what Mayans do with the snakes, which they use in the religious ceremonies. The serpent mound of Ohio, represents religious consecration of the dead to the god animal or reptile. Prof. W. H. Dall

n "Mask, labrets, and certain aboriginal customs, says: "The original population of America is too distant to form the subject of discussion. There can be no doubt that America was populated in some way by people of an extremely low grade of culture, at a period even geologically remote." Prof. Dall calls attention to the singular form of carving, representing a figure with the tongue hanging out, and usually communicating, with a frog, otter, bird, snake, or fish, observed on the Northwest coast of Oregon to Prince William Sound, and also in Mexico and Nicaragua, details of art related to religious and mythological ideas. The prominent Tlaloc nose (God of rain) and certain Central American figures, of which the supposed elephant proboscis is but one form and the bird bill (thunder bird) of the Northwest coast, are but different methods of representing the same idea, and one is undoubtedly the outgrowth of the other. These are religious.

The general tendency of the more recent opinions in regard to the peopling of this hemisphere is that it was partly from the Atlantic side, and they look to Europe as the original source of American man. Dr. Brinton in his "Races and Peoples" says: "These knotty points I treat in another course of lectures, where I marshal sufficient arguments, I think, to show satisfactorily, that America was peopled during if not before the great ice age, that its first settlers probably came from Europe by way of a land connection, which once existed over the Northern Atlantic. Dr. Horatio Hale is inclined to substantially the same view. It is evident that this idea of a migration on the Atlantic side reached by linguists after a study of a large amount of data, is to be attributed largely to the unsatisfactory result obtained in trying to trace out the links in any other direction.

Dr. Brinton has arranged his linguistic groups of American races on this basis, with two Atlantic sources. The Athabascan and the Shoshone, sent out colonies, which settled on the Pacific.

Virchow showed that skulls from Northern Vancouver's Island revealed an unmistakable analogy to those of Southern

California. Other physical similarities marking the Pacific Indians contrast them well with those East of the Mountains. Higher civilization was contained in the Mexican group which Nadaillac thinks points to Pacific origin of the Americans.

The linguistic relation between civilized Mexico and Central America and the Mound-builders is not sustained.

Time is an element in the development of languages, and for the diversity of languages. In pre-Columbian America, at the time of the acme of Mayan civilization, when the Tree and the Serpent were worshipped, or represented something still religiously interesting or important, and considering only the pictographs, and petroglyphs, or religious language an expression of evolved intelligence from nescience, or blank animal ignorance, the time required to morally differentiate the numerous stocks and dialects of America must have been very great. Few students of American architecture, and archaeology, entertain any longer a doubt that the monuments of Mexico and Central America, are attributable to direct ancestors of the people found occupying the country at the time of the Spanish conquest. Brinton says: "We cannot identify the builders of the ruined cities of Palengue in Tobasco, and Copan in Honduras, with the ancestors of any known tribe, but the archaeology evidence is conclusive that whoever they were they belonged to this Stock, *the Maya*, and spoke one of its dialects." The ruined structures of Copan, Palengue, T'Ho and other cities were deserted, and covered with primitive forest apparently; but others not inferior to them, Uxmal, Chichen, Itza and Peten were the centres of dense population, proving that the builders of both were related. Marquis de Nadaillac, who embraces the Mayas, the Aztecs and other Central American Stocks in the Nahautl race says: "It is to various branches of the conquering race, that we owe the ruined monuments still scattered over Mexico, Yucatan, Honduras, Guatemala and Nicaragua, and found as far as the Isthmus of Tehuantepec, (*L'Amerique Pre-historique.*) The Ancient Mexican called the disease syphilis Nanahuatl. McLean claimed that this word meant "Understanding

Serpent." Bruhl, however, ridiculed this interpretation of the word, stating that it meant "Syphilis," and nothing else. I think myself that McLean was right. This disease Syphilis is strangely represented on potteries of Ancient America, by a serpent wound around the neck of the patient, while its head is shown in the act of eating the special parts of the body usually attacked by the disease. This representation means "Syphilis," and has something to do, is the idea of those ancient peoples, with generation (*creation*) of human beings. It was the disease of "Nobles," representative of power or powerful persons.

The ruined Pueblos of New Mexico and Arizona are to-day attributed to the ancestors of the sedentary tribes of these sections. It is also conceded that the cave- and cliff-dwellers, "Snake" and "Eagle" Indians, are attributable to the ancestors of the present Pueblo tribes, the Mayans.

The "Pillars of Hercules," the "Tree and the Serpent," are nothing but the history records of religious pilgrimages to a better world, an evolution of mankind so to speak. These are found on Mayan hieroglyphics and on coins, also represented together. The tree and the serpent, by itself represents the birth of a new intelligence in mankind, when religion was evolving in the human brain. Is it wonderful then, that such a picture, a whole alphabet, a language in itself, should survive from the distant past? The idea whether of good or evil, applied to it is relative, from our later historical standpoint, by the religious complexity of language of to-day. At that early period however of man's civilized evolution, it may have meant nothing more than a plain record of fact. The creeping serpent in a Garden of Eden, in all probability represented only the birth of a new Spirit, that of religious understanding, and was a symbol of language at that time having some reference to *Serpent Worship*, (See note.)

NOTE:—Sir Henry Rawlinson says: "So great is the analogy between the first principles of the science of writing, as it appears to have been pursued in Chaldea, and as we can actually trace its progress in Egypt, that we can hardly hesitate to assign the original invention to a period before the Hamitic race had broken up and divided."

Humboldt says: "According to the views which, since Champollions' great discovery, have been gradually adopted regarding the earlier conditions of the development of alphabetical writing, the Phœnician as well as the Semitic Characters are to be regarded as a phonetic alphabet that has originated from pictorial writing; as one in which the ideal signification of the symbols is wholly disregarded, and the characters are regarded as mere signs for sounds." (*Cosmos*, Vol. II.)

Sir William Drummond in his *Origines* says: that "hieroglyphical writing was in use among the Tsabaists in the first ages after the flood, when Tsabaism (planet-worship) was the religion of almost every country that was yet inhabited."

Sabaism, was the doctrine of a sect, in Persia and Chaldea, who recognized the Unity of God, but worshipped intelligences supposed to reside in the heavenly bodies; the common people extended the worship to the heavenly bodies themselves. Tsabian or Tsabaist, was a member of a polytheistic ancient Haran Sect of Mesopotamia; supposed to be referred to by Mohammed in the Koran.

A Sabian or Mandœan was a member of an ancient sect of Gnostics still existing in Babylon, who combined Judaism, Mohammedism and Christianity with the ancient Babylonian worship.

But my pot of protest is ever bubbling and must again erupt. Much that I have written here is not quite along the line of my usual thought—perhaps not at all. For it is the moral attitude of God towards mankind and all the face of the earth that has occupied my contemplations which, feeble as they may be, are my highest and best employment.

The sufferings, the happiness, the temporary comforts of all the classes and individuals of the lower orders of animate life are continually present in all my protests against the organized cruelty of Nature and Nature's God, against man and the children of men, from their cradles to their graves. Their miseries and agonies form the background of sympathetic color for the picture ever before me of man's unhappy state, subject to the microscopic meannesses, the cataclysmic catastrophies, the capricious cruelties with which Nature and Nature's God pursues his steps. Yes, even his helpless, child-like, childish form in infancy is not able to appeal to Nature's heart.

I cannot justify the doing of evil that good may come of it. It is not necessary for Omnipotence to do thus. To excuse Him is to accuse Him. Evolution is a merciless mill ever supplied with grist.

(To be continued.)

EROTISM (NORMAL AND MORBID) AND THE UNWRITTEN LAW IN OUR COURTS.*

A MEDICO-LEGAL PLEA.

By CHAS. H. HUGHES, M. D.,
ST. LOUIS.

A. D., a wealthy young St. Louisan, who in a fit of suspicious anger and jealousy, shot his wife, he having said at the time she was faithless and the child was not his, relied upon his money to free him from the consequences of his crime, when he surrendered at the nearest police station, saying: that the deed was an accident and his money would free him. He tried the unwritten law but his counsel did not plead it. He pleaded paranoia, and in the final trial epileptic paranoia, but he was convicted and executed.

Belief in the infidelity of his wife did not exist in his mind save in moments of inebriate passion, under the asserted influence of his paramour and his child was not proven to be nor reasonably supposed to be illegitimate. The unwritten law would not have been considered in this case had there been a foundation in infidelity because those insanoid juries who consider and apply the summary penalty of death to men who violate the sanctity of the home are not disposed to censure or punish the female guardian of the home's purity. Retribution sauce that is

*Concluded from May, 1907.

by them esteemed to be appropriate for the gander is not proper for the often alluring goose. This is the law their emotional minds make above the law of the statutes. The detonation of a gun and a woman in the case unbalances their nervous system and they are deluded with that wonderful lawyer's plea for the preservation of the sanctity of the home which may have no sacred virtue in it. The virtuous sanctity depending upon its occupants and the shooter himself may be far from a paragon of virtue.

A matrimonially mismated man in Denver whose wife got an order of separation with maintenance and whose husband defaulted in payment, because of being out of a job, when he got his last jail sentence, tried to explain why he could not pay, but concluded nothing could be done with a judge when a woman is around crying. There is some truth in this remark applied to a greater cause. When a woman starts in on the "briny line," as one of Judge Baldwin's characters expressed it, she makes a strong argument with a man, even though it has no logic with it.

A man in Shreveport, La., Lee Brock, after resenting the cursing of a lady (Mrs. Kelley) by the killing of a man (L. A. Byckham) was promptly acquitted and married the girl in the court room, the trial judge performing the ceremony and the jurymen being the witnesses, fifteen minutes after this acquittal. Chivalry steps high and life is cheap there. When the bloody "lips of the boy in a love kiss unite with the lips of the maid whom his bosom holds dear" over the bier of one whom he has just killed because of an oath directed to the woman he loves, love must be callous that can bask in the warm blood of the newly slain.*

*ACQUITTED OF MURDER, MAN WEDS IN COURT.

Mrs. Hattie Kelley Weds Louisianan Who Resented Insult Offered Her.

SHREVEPORT, LA., March 13, 1907.—At midnight last night in the courtroom, where he had five minutes before been declared not guilty of murder, Lee Brock was married to Mrs. Hattie Kelley, the woman in defense of whose reputation he did the killing, which caused the trial. The jurymen who had acquitted him were the witnesses, and the trial judge performed the ceremony. Brock shot L. A. Byckham last summer, alleging that he cursed Mrs. Kelley.

We are disposed to question the mental as well as the legal equipoise and soundness of judgment of a judge sitting on a bench created by the law, to secure the administration of law, who approves such a verdict against the law as in this case. Such jurists and juries are out of harmony with the normal and legal demands of their vocations. Their psychic neurones need adjustment in conformity with the law respecting and law enforcing spirit of the majority of the American people who wish to see law supreme in the land and its majesty revered and maintained.

A young girl in St. Louis charges a policeman with offering to kiss her. The policeman proves an alibi and averts dismissal from the force and a possible unwritten law tragedy.

Paul Thieman, editorial writer for the *Denver Post* says: "I recall a case, years ago, in which a simple sort of man was goaded by his virago wife to kill a distinguished physician for having taken advantage of her. . . . *The man had no evidence of it except her story*, but, after being tortured with three months of her taunts of cowardice, shot the physician to death. . . . *The woman was a liar.* . . . But owing to public sympathy for the poor, simple-minded, foolish husband, he was acquitted under the 'unwritten law.' "*.

Fifty-three out of one hundred talesmen summoned for the trial of Policeman McNamara, who killed his wife and James J. Brophy, a bartender, in the Royal Hotel, St. Louis, last August, declared that they were opposed to capital punishment, or would not inflict the extreme penalty upon one who took the law in his own hands "to defend the honor of his home and name," as they called it.

Brophy had just registered himself and Mrs. McNamara as "John Smith and wife," when McNamara rushed up to the clerk's desk, shot Brophy first and then killed the woman.

McNamara, a tall, powerfully built man is charged with indignities to his wife, that he forced her to desert

**Denver Post*, March 12th, 1907.

him, was a member of the police force at the time he violated, by this murder, the law he swore to obey and help enforce. He is confident of acquittal of this dual murder, so insignificant is human life now and so slight are obligations of respect for law under the "protection of the home," even in a distant hotel.

Garland B. Moore, a rural mail carrier of Springfield, Mo., last December stabbed his sweetheart to death, because she did not reciprocate his affection satisfactorily and his domineering desire. His attorneys offer a defensive plea of adolescent insanity. It is fortunate for society when these hebephreniacs, real or feigned, take their own lives, for then the breed of mental unstabiles is stopped. But the penitentiary for life or the garrotting rope of the law is a good remedy.

In Denver the telephone wires got crossed, a politician made a wrong connection with another citizen's wife. Unpleasant, even hot words passed between the two. On her husband's return the lady, with tears in her eyes, tells him of the insult. Forthwith he goes with his ready revolver to the offending man. Hot words are exchanged, a drawn knife and a responsive pistol shot from the pursuer would have taken the other man's life, but for a timely dodge, resulting in a skin wound and a hole in his fedora, and the unwritten law is again vindicated, according to this man's notion.

In Springfield, Ill., a divorced woman (Mrs. Ollie Gibson), seeking a reconciliation with her divorced husband, is approached while reading a repentant letter she has written, by a lover spurned (Peter Clarke), and shot in a crowded street car. The unwritten law rights a wrong of a woman changing her mind and repentant.

In line with these homicidal erotic psychlampasias are the less harmful and not so flagrantly law defying suicidal psychokinesias which are often manifest at the very beginning of puberty, prodromal hebephrenia and forshadowing psychoses and prodromal of it or paranoia if the suicidal attempts fail.

In another instance in Springfield, Ill, March 27, 1907, a

fifteen year old boy's love for a school girl of the same age, unrequited, caused him to take his life apparently. But the cause of the self destruction was erotic neurone centers overwrought, unstable and shocked beyond the normal.

If all the psychic dyspareuniacs, seeking second-hand felicity are to be allowed to kill the so-called invaders of the often pseudo sanctity of inharmonious homes, whence happiness has usually already flown before the shooting, of what use is it to make penal laws against other forms of wrong.

The divorce courts of this country are widely enough open to marital victims of infidelity where the marriage compact has been esteemed as a joke, or as a fragile tie at least, by one of the parties to the compact.

Ordinarily well balanced physicians, clergymen, congressmen, eminent orators and other men of mark and merit in the public eye have sometime felt the annoyance and baneful influence of the persisting pursuing erotopath in society not from the lower walks of life either.

The intensely erotic wife of Potipher, perhaps famishingly erotopatic also, might have made the faithful and strong Joseph yield had he been a weaker man erotically and less loyal to his master and upright than he was. He, too, under circumstances of less personal honor and self-control might have been a victim of the *lex non scripta* and failed later to rescue the people from the threatened famine. For in those days, as we may infer, the unwritten law was in vogue, for Solomon* warned certain young men of his time, "void of understanding," against the possible danger of a dart through their livers should they be so unwisely wicked as to "hasten to the snare" and go unto the wife of a neighbor, when she enticeth him with loving entreaty and erotogenic perfumery and decorations of bed and person, "when the good man of the house is not at home," when "he is gone a long journey."

Solomon, who understood impartially the psychology of

*"With her much fair speech she causeth him to yield,—with the flattering of her lips she forced him. He went after as an ox to the slaughter; as a fool to the correction of the stocks; as a bird hasteth to the snare and knoweth not that it is for his life, till a dart strike through his liver."—*Proverbs*.

love and lust, appears to have known that women were blamable as well as men where the dominant tender treacherous passion was concerned.

The erotohysteric and hysterically delusioned falsehoods of certain hysteric women, combining unlawful, morbid affection with morbid revengeful jealousy, the jealousy, deceit and erotopathy of the woman repulsed, if not scorned, as in the case of the daughter of Herod as toward the purer John the Baptist, are to be considered in some of these instances when, in consequence, murder follows and the so-called unwritten law is appealed to in vindication.

The bloody combination of vengeful violence and morbidly extreme passion appear in this ghastly incident of history as a truthful revolting picture of the nymphomaniac erotopath transformed into a victim of violent necrophiliac passion. Dead or alive she would have him—pure and gentle John—no more fitted for sexual affiliation with such a woman than an angel with a devil, and through her erotopathic influence and her mother's over her mother's husband she got her erotopathic blood wish.

Herod, of course, went free, though the accessory before the fact, through the seductive influence of a charming young woman who danced lasciviously before him. Other men since Herod's time have thus fallen and finally surrendered after vainly pleading to be absolved of a rash femininely extorted and influenced promise. They have through similar influence committed unjust capital crime. There yet live other women to inspire and be the cause of unjust murder, no better at heart, no healthier in their love, no freer from revenge, jealousy and reactionary returning love. Women are yet existent so morbid that they could ravishingly embrace and kiss the dead, as passionately erotic as the morbidly erotic Salome. Such women yet have caused men and even kings to do their bidding. A case of record in a modern court shows where the cuckolded husband was induced by the plausible yet primarily erring cuckold wife to kill, for her revenge, the weak victim of her cuckoo call. In this remarkable case the odium of the

crime of adultery was fastened on the dead victim of a woman's deceitfully seductive lust, a murder threatening and murder inspiring woman, and the murderer went free of crime under an erotically unbalanced jury's verdict given under undue excitement, almost hysterical, to protect the purity and defend the sanctity of an erotically impure, unsanctified home.

Gentlemen of the jury beware of the plea of the unwritten law of justification for murder where either a normal or a morbid woman's morbid erotism and the normal or morbid jealousy of a murdering man are concerned. Jealousy and morbid love do not balance revenge or justice well.

It is manly to protest against and avenge wrongs against the physical frailties of women and to avenge violence to her with violence, but it is wise to be cautious where the frailties of her erotic life are balanced against a man's life made violently forfeit and the summary taker of that life on trial for murder and vindication beyond the law of the statutes.

The testimony of the *dead* is not before you and the erotopathic frailties of some of the women who sometimes victimize even strong men in their weaker nature and *vice versa* are not before you always in these cases. A part of this testimony is silent with the slain, another part is withheld and no alienist expert testimony to show you what morbid states of the love passion may exist in the parties concerned and their undue influence, for this sort of testimony has never yet appeared in such trials. You may see justice in some of these cases only as she stands holding her unevenly balanced scales in the shadow of the boundaries between right and wrong, "man all and only wrong, woman always and only right, and her champion and avenger hallowed in the light of unerring lovely woman's fidelity and purity, outraged by ruthless, sinful man."

Try and separate the amorous saints from the erotic sinners among women and try and consider, if your own home love bias toward the good, the pure, the beautiful will permit, see that there are erotic and erotopathic devils

among women, as there are like devils among men and some of the former do not in their erotic life demeanor, justify the forfeit of a human life in their behalf and the freedom of the murderer, even as there are men whose crimes against women deserve the penalty of death by law.

Remember that the partner in this crime or sin or disease or the unwillingly overpowered innocent victim as the case may be is dead and can bear no witness. "Dead men tell no tales." Bear in mind the chief witness against life and home was a participant willingly, or may be unwillingly, from disease in the sexual sphere of her own organism or may be in that of the slain victim, also consider the possible motive, not alone the inspiration of the murder, that may sway the mind of the story teller of her own dishonor and shame or perhaps uncourted assault, for the shielding and saving of the man arraigned for the killing. Estimate justly, if you can, the true relations, probable motives and possible eroto-sexual disease impelling to the home desecrating act, whether in the man, or jointly in both and in the murderer, whether in the latter it be one of jealousy and revenge, prompted by other and private motive or whether excited to the verge of mania by insanoid hysteria or nymphomaniac passion unrequited of the woman. It is not always insult and outrage that causes women to seek man's destruction.

Here is another example of the law defying, unwritten law idea which comes to us as we write, March 12th:

Albert ("Bugs") Nichols, a teamster, employed by the St. Louis Transfer Company, was shot and killed by Howard ("Bum") Court, who conducts a restaurant at No. 512 Spruce Street, in a doorway at No. 509 Spruce Street, about 1 o'clock this morning. The shooting was the result of alleged abuse to Mrs. Emma Court in her husband's restaurant shortly before the tragedy. Nichols died on the way to the City Dispensary, and Court surrendered to the police shortly after. He admitted having shot Nichols. According to the police, Nichols entered the restaurant about 12:30 o'clock and ordered a sandwich. Mrs. Court says he refused to pay for it and cursed her.

She told the police that she then turned out the lights and said she was going to close the place. After Nichols left she returned and turned on the lights. Nichols is said to have returned and slapped Mrs. Court's face. He then went to the Mark Twain Social Club, at Nos. 507 and 509 Spruce Street. The woman found her husband in a nearby saloon and told him of the affair. He is said to have invited Nichols out of the clubrooms, and the latter drew a knife. Court backed away and fired three shots, two of which entered the body of Nichols. He fell in the doorway and died at the city hospital.

It might be said by some, if the woman's story is true, the man who assaulted her deserved to be shot. But that psychic state of society that permits society's laws to be put aside and self-adjudication substituted by murder, by any man on his wife's unsupported story of assault, is as insulting to the sanctity of the law as other offences insult the sanctity of the home. This murder was not done in the home nor for the crime of crimes which all men execrate, but for an offense given by a teamster to a woman presiding over a night restaurant in the tenderloin district, and the murder was done at the instigation of an angry woman slapped by a drunken man and on her angry, unsupported story alone.

Brain instability promoted by drink and fostered by a much and too rapidly developed unstable erotism, disregarding the restraints of the law, where there is a woman in the case, with erotic passion, jealousy and revenge dominant, augurs not well for the weigher of justice in American society and in the courts of the country.

Half the world in our cities, especially in certain localities thereof, through bill boards, theatres and otherwise advertised lasciviousness, seems to be living under dominant, higher intellect damaging and moral destroying, sexual erethism, verging closely upon or passed beyond the rational boundary line of erotic normality.

In trials for murder, under the unwritten law as a plea in defense it would be well to inquire of the jury panel not only if the unwritten law would be considered a

justification, but as a new feature of jury selection, whether the juryman himself is erotically morbid and unbalanced.

Many years ago in an eastern city a celebrated case got into the courts where a dentist giving ether was charged by the woman operated upon with ravishing her in the chair, the charge being a pure delusion resulting from the etherization. Since then the dentists have always had assistants where anaesthetics are to be given and also in other cases where anaesthesia is not required, as in teeth-filling, etc. The advent of the trained nurse and of anti-septic surgery requiring more assistants than formerly and the custom of having a special anaethetizer has prevented late scandals resulting from hysterical erotopathic hallucinations. But with the country practitioner and gynecologist who has often to economize in service in order to make small bills within the reach of patients, there is still great risk in gynecological treatments and examinations of a certain class of neuropathic women, who, from a morbid hysterical egoism are liable to detail incredible erotic delusions of sexual liberty and ravishment almost impossible of occurrence in the ordinarily equipped gynecological examining and operating room. The marvellous, the impossible and mysterious are, like the fondness for receiving attention, closely interwoven in the psychic life of the erotic hysteric. With such it would be well for men either to have nothing to do or treat them only under observation of witnesses or in conjunction with women practitioners.

The lives of innocent doctors have been taken and are liable to be taken any day in the present abnormal preponderance of the unwritten law sentiment, where the unsupported statement of uncertain, or maybe morbid, minded women are taken for so much, and that of the man cannot be had for reason of his summary death, or if not dead, deemed of so little value by an erotically over-emotional jury because it is merely a man's discredited testimony.

Out in the goldfield state of Nevada, a man follows and finds two adulterers, after a pursuit of many months and many thousands of miles. They are sitting at a restaurant table, dining cheerily together, each enjoying

the other's company. Both apparently happy in their mutual sin. The "wronged husband," as he is called, may have been the one most to blame, and the "ruined wife," though she seems happy enough in her ruin, who equally with the man, doubtless "had proclivity to sin" are met there suddenly. The male paramour, without time to draw or explain or pray, falls before the deserted husband's avenging bullet. The murderer mounts a table and proclaims the righteousness of his deed against the man, with no word of censure for the surprised and swooning woman.

It is becoming the neuropathic fad now, as in the case of Mrs. H. K. T., for an erring woman to lay bare the secrets of her past erotic life, sometimes most dramatically, while sympathetical juries weep when they should be doing some cool logical thinking. Tales of moral erotic delinquency are told for a motive of freeing cuckolded husbands from consequences of murder, or from some hysteric motive, which only certain women have, and no man, not even an alienist and neurologist can always fathom without asking corroborative evidence save that of the overwrought husband's real or imagined wrong, and a weeping jury lets the murderer go back to the cuckolding arms of his murder-inspiring spouse.

In Carthage, a Missouri city, in the month of March, a young doctor (Meredith) met his death, at the hand of a so charged outraged husband (Sanderson) from an asserted sexual wrong based on his wife's unsupported confession. The jury, as usual, in this case, though not on the usual ground of insanity, found a pretext of self-defense, though the young doctor was shot, before he had time for explanation or defense, in his own office. This murderer was acquitted.

One of the strangest things connected with all this unwritten law business is the paradoxical procedure of indicting the man often only *pro forma* and omitting to indict the confessed co-adulterer as accessory to the murder, whose acquiescence is by no means always coerced or over-influenced by the adulterer.

This is one of the paradoxes of the law officers and of

public sentiment when a woman is in the background, as it is in the often wrong decision of juries in these cases when both the adulteress and the murderer should be held accountable.

The psychology of crime and responsibility ought to be the same, ordinarily, in man and woman in these cases. Women's peculiar nervous infirmities and often hysteric propensities to exaggerate and portray erotic delusions and her menstrually excited psychanopsias, hysterical pseudopsias, etc., alone excepted, and which ought always to be considered by judges and juries and husbands even, in estimating the value of her testimony, especially in a matter involving life or death. A woman may, under willful motive of provoking jealousy, tell a false story of advances never made, and under morbid psychopseudopsia even tell of seductions that never occurred.

The vagaries of the enceinte and the hysterical, certain erotopaths and certain catamenially disordered departures from propriety, as the often then exhibited drink propensity and hysterical fiction are condoned by man and extenuated on the testimony of psychiatric physicians as resulting from peculiar morbid states of her nervous system at such times in certain neuropsychopaths. They should be put in the balance and duly weighed also, when a man is under indictment for adulterous crime or his life has been made the forfeit by a jealous husband resorting to the unwritten law on a confession of her infidelity under influences she may say she could not resist, and which man so often calls her shame, her ruin, but seldom her crime.

A relative of the Strother brothers, overhearing a conversation about that mistried case, goes into the hallway, transfers a pistol to his hip pocket, returns with the manner of an autocrat to the party conversing regardless of the right of free speech, and says the conversation is distasteful to him his revolver wielding egotistic majesty, and unless it is turned from that subject there will be trouble.

In a psychically balanced community, normal in its estimate of constitutional rights and not erotically perverted on this subject of eroticism and killing, this man should

have been put at once behind the bars and held for investigation, as either an insanoid or criminal disturber of the peace and a threatener of other men's lives.

A case occurred lately in Missouri where a woman with her paramour were condemned to be executed for the murder of her husband. The governor, for merely sentimental reasons, that it might not be recorded that the fourth woman murderess in the history of this state should be hung, commuted the penalty of both to life imprisonment, the unnatural, fiendish woman, because she was a woman, and the paramour and partner in the crime, because it would not be right, in his opinion, to condemn the one equally or more criminal because he had made the murder a possibility and was the erotopathic criminal cause, as well as accessory to, the great crime.

As we write, Virginia gives us another and most painful record of erotic homicide, if the wires flash the truth. It is that of a young, loved daughter, despoiled of her womanly honor by the fiendish crime of a drugged drink, avenged in blood by the love and passion unbalanced father. Both the slayer and the slain are of the best families of that good and great historic state. If the girl's story be true state statutes have no punishment adequately fitted to such a crime. But what if the story should be but the delusion of a latent psychopathic, excited into morbid misconception of a sexual wrong by alcohol and hysteria, as may happen to women of the insane temperament under alcoholic influence or hysteria, or ether or hasheesh, or atropia.*

The sweet and high and almost holy sentiment of our noblest manhood for the true, pure woman, our mother, beginning with the earliest recollection of her nurturing care and love and continuing undivided until another woman, esteemed as sweeter and more lovely than our

*The chief counsel for the accused was John Lee, the Lynchburg lawyer, who successfully defended the Strother boys. Accused—Judge W. G. Loving, manager of Thomas F. Ryan's stock farm. Crime—Killing Theodore Estes, April 24th, 1907. Defense—Unwritten law; prisoner alleged Estes drugged and wronged his daughter. Prosecution enters a general denial. Principal witness for defense—Elizabeth Loving, defendant's daughter. The jury in this case almost immediately acquitted. After the trial the defense's attorney conceded the innocence of the slain young man Estes.

mother, came into our life further developing an abiding emotion of tender, considerate regard for all womankind that tends to sway our judgments, often blindly in behalf, of all women when it should not influence the reason wrongly against the just criminal conviction and punishment of such women as are not, nor never have been, nor never could be the personified purity, virtue and guilelessness of the woman we paint upon our memory neurones as the saintly mother of our infancy, or childhood, or the woman of all women of our youth and early manhood heart and home, whom we yet hold dear and to be inviolate, if our strong arm might save her from the lustful leprosy of the stealthful ravishing lecher's lure.

But the lustful and the murderous of the opposite sex are not all of masculine mind, nor are the pure in heart all and always of womankind, though the term uxoricide, which man in his erotic generosity toward his complement sex has coined, has no equivalent for men murdering women. When a woman, lured by, or luring her paramour, singly or jointly, kills the man whom she has promised to love and honor, what but an overbalanced erotic sentiment extenuates her crime when the Governor of a Commonwealth commutes such a crime because the criminal is a woman.

When a loved married woman wilfully descends in lustful adultery, deserting a faithful, devoted husband, as some of the women do, notwithstanding the illusory confidence and honor many right-minded and faithfully loved men have for the sort of women they only intimately know and love and revere, she "falls like Lucifer, never to hope again." Then why should man let himself be swayed by sentiment predominating over his reason against sin and crime, guised in the luring habiliments of women. There are women, as there are men, adept in criminal impulse. Lustful, lawless erotism and lustful perversions abide with many of them as with like characterized men. Men's minds are found in women's frames and brains and *vice versa*.

The extension of the sentiment of leniency and extenuation to women for the same crime, under the same

circumstances and environment, without the legitimate excuse of insanity, that would bring to the fullest lawful punishment is an illusioned sentiment and not an enlightened reason result. And the setting free of a male murderer when an erring women beyond the age of consent may have been in whole or in part the cause and makes confession thereof, is an injustice to collective, lawful government and an evidence of instability of reasoning on the part of juries, because they are swayed by an erotically biased feeling for the women and the cause of the erotically impulsioned man, which may, on careful cold consideration and examination be found to have been, as it too often has been, after all the facts have been later learned, an illusioned and delusioned impulse and explosion of jealousy, frenzied, nonfebrile delirium of the love passion, too emotionally and too hastily, too unreasonably yielded to and unrestrained.

These facts suggest, from a psychological standpoint, an additional line of inquiry of the jury talesmen in cases where the *lex non scripta* for the extenuation or acquittal of murderers whose possible erotic jealousy or probable erotic wrong has entered into the crime. In these cases the jurymen from the true psychological standpoint of competency should be asked if they could give the testimony of both man and woman precisely equal weight in their minds, and if each juryman were capable of inquiring into the culpability of the woman in the case, and into that unwarranted jealousy that might color the testimony of the man, and that the woman might be influenced in behalf of her husband to give exaggerated testimony. The condition and quality of the minds of both husband and wife in such a case being liable to be influenced to an extreme degree and to untruthful exaggeration, by motives of self-interest, *i. e.*, self-preservation, the first law of nature and of revenge disproportionate to the actual crime, or possibly of the woman's approaches not being reciprocated, resulting in a scorned woman's desire to be revenged, as has happened, as medical men know, in instances where feminine nymphomania and morbid erotopathy has been the

moving mental influence with the woman. The erotopath in society can transform an upright and lawfully abstineant man's connubial happiness into a hell of morbid erotic importunity and scorned vengeance and slanderous suspicion.

Good men, devoted and true, have married such extremely erotopathic women, as women have married drunkards, hoping to change their morbid erotism, only to find their after life a hell, or to see other women or men entangled through unjust slander as to their love relations and their husbands or others unjustly slaughtered through dissemination of erotopathically illusionally conceived stories.

The erotopath is abroad in the land, dangerous to life and morals, but not enough in visible and rightly understood evidence in our courts of justice.

The shooting of an individual for an eroto crime, real or supposed, is not a *dementia americana*, as Mr. Delmas, in his plea in behalf of Harry Thaw, the murderer of Stanford White, claimed, for dementia does not shoot, or if it does, it does not plan and design to kill. The acquitting of an erotic murderer, on the testimony of the criminal and his wife, while it is not insanity, is an emotional insanoid state, which it were well for the law to better regulate than now by more rational jury methods and further penalties for that sort of crime, for the excuse of which the unwritten law is now too often, too confidently and too successfully invoked. Something, and something more and better than now obtains, should be *written law* on the subject.

Virginia in her early days had her cavaliers who could, on right occasions, chivalrously defend life and honor of man or woman, but that escuagic cowardly display of this once knightly virtue of our Virginia ancestors of colonial days, which can coolly take the life of a vulgar human being who applies an oath to a woman without otherwise harming her, when a personal castigation or the degradation of a penal sentence would be more appropriate, and the court that approves of the spilling of blood in self-made law, for such an offense are not, at this day, comprehensible even to one descended of a Virginia and Maryland ancestry.

In imitation of this false chivalry, a negro in the streets of St. Louis assaults another negro for the verbal offense of calling him a "snitch," whatever that may mean in the slang of the underworld of color, takes his life with a revolver and calmly walks away and surrenders himself at the nearest police station, as though he had done a most chivalrous and meritorious deed in thus invoking and executing the unwritten law.*

A man abandons his wife, keeping her ignorant for years of his whereabouts, returns home unannounced; the town liar has lodged in his maudlin mind a suspicion of unlawful intimacy against a poor but charitable small store-keeper, and the vagrant non-provident deserter of his family, before even going to his wife, seeks the man in his place of business and kills him with the ready, but half incoherently expressed defense, "He ruined my home and I am glad I killed him."

Erotism in its many morbid perversions, its inciting to jealousy and revenge, its dominance over judgment and the general brain and other nervous instability it engenders, should not be allowed to be its own arbitrary judge, jury and executioner with its own self-devised penalty of possible knife or pistol or poison.

The nurturing of neurone instability in the erotic spheres of the brain as in all others would seem to be a pertinent subject of law and pedagogy just now. Though pedagogics has concerned itself too much with cramming, often to cramming the brain and mind with knowledge alone, to the neglect, or partial neglect, at least, of the physiological regulation of the mind's normal dominance in its inhibitory centers, over the erratic and unstable impulses of the propensities and passions.

The right balance and control of the organism, bringing all in harmonious adjustment and regulation to rational normal conduct, in the erotic, religious and other spheres of the emotional life with dominant enlightenment, judgment and control should be the aim of right education.

The brain-storm life, the psychokinesiac episodes, too

*Killing of Hubert by McLean, March 16th, 1907.

ready to see, under dominance of erotopsyche erethism and imagine the sanctity of a virtuous home violated against a virtuous woman's will, the ruin of woman, only courteously treated, as is her due, and too ready to take the law and the pistol in hand, require a regulating and restraining influence in better trained and strengthened inhibitions of brain, helped to be strong instead of weak by law, by level-headed judges and brain-balanced juries, that do not weep and wobble in their judgments because there is a woman in the case.

A valet in a New York family becomes enamored of his mistress and indicts a love letter to her, and on being promptly dismissed from service, returns, gets into his master's bathroom and attempts to kill him with a tenpin club.

This unstable erotopath expressed no regret for the attempted murder of the man whose wife he wanted and thought his appeal to the unwritten law justifiable because she was *mysteriously* attracted to him and he could not help it.

Asexualization and sequestration for awhile in an insane hospital would probably cure him of his double propensity to lust and murder.

An eighteen-year-old son of a St. Louis physician, with a step-mother since he was thirteen days old deliberately shoots his father without after remorse and to get even with him for displays of irascibility toward him, (some parental denials, his diplomas and savings money in bank and ordering him from home a year previous,) though the boy was in business for himself in a responsible and exacting railway office, which the good education his father gave him enabled him to fill with precocious ability, a position as assistant to the superintendent in the profit and loss department of the Missouri Pacific Railway, which his grandmother, with whom he lived, took him from, thinking the tax too great upon his brain. He was regarded as an expert rifle shot among his associates. "A fool's bolt is soon shot."

This young fratricide, reading daily, doubtless, of the

unwritten law acquittals and psychically unstable from the overstrain of cigarettes and work and indulgences beyond his years, (confessing to thirty daily) just out from the overtax of school probably, is a revelation, by imitation of the vicious extent to which the idea of the self righting of wrongs, real or imaginary by bloody vengeance, is spreading among the neurotically unstable.

This boy visits the house of his father, doubly armed, to demand money he considered due him with two loaded revolvers, to be sure the contemplated deed will not fail, because "he knew his father was the very devil when angry," and he expected trouble. His father was raking the lawn when the son arrived. He had entered the kitchen to get some seed to sow upon the lawn. His mother thinks he has come back for forgiveness, but he has come to ask his father for his diplomas and money in bank. His father answers him passionately, "If that is what you come for you had better get out before I wring your ears." The revolver is drawn and the father is shot, and shot again after he has fallen.

The exaggerated egotism of an over-indulged, too rapidly educated, possibly brain-damaged youth, appears in this precocious youth's speech and conduct. He has been to Sts. Peter and Paul's high school and to a university. He wears clothes of a decided "varsity cut" and acts and talks as a "man of affairs."

In his own estimation he is superior to his father and disdainfully meets him, as he is described in the press. He is unruly and troublesome at his home, but tractable at the home of his grandmother. His father lately acknowledged what others had told him, that his stepmother, whom he loved and always thought his own mother, was not his mother by blood relation. The withholding of this knowledge seemed to incense him against his father and greatly changed his feelings toward his mother. He is described in the press as having the "varsity" egoism that disregards the rights and feelings of others in hazing and imperils what should be the golden rule aptitudes of the rising generation in our universities. Gratitude for parental

care and education and respect for the progenitor of his blood and nerve have no place in this ungrateful, mentally unstable young man's heart. Filial love and duty have been supplanted by a "varsity" and business egoism of a precocious, mentally rushed life, and his father is shot nigh unto death by his ungrateful, unfeeling hand, but finally recovers.

To arrest and change into right mental action the too often recurring displays of mental instability and its disregard for statute law is a problem as great as the care and sequestration of the plainly recognized insane, imbecile, idiotic and inebriate. These insanoid neuropaths had better not have been born, and if this be a psychic truth it were important that methods of education, social customs and neuropathic emotional jury verdicts that foster the growth and psychic explosions of such homicides should be prevented. The times demand steady-brained, unemotionally warped men.

These brain storms of selfish, vengeful, uncompunctioned, murderous, unrestrained impulse, these "flashes and outbreaks of the fiery mind" of youth and "savage unreclaimed blood," neglected in normal inhibition training up to manhood, should be made to cease, through better training and the engendering of progeny that will not make and execute unwritten laws and judgments, or in jury boxes, will not permit the written law of the statutes to be overthrown and disregarded by private personal vengeance, nor subterfuges of *pseudo* insanity made to thwart the law of the statutes salutary punitive prescription, of late years too often ignored by emotionally excited and erotically hypnotized juries.

A ruling such as was handed down in the Thaw and Loving cases, sustaining the non-impeachability of the chief woman witnesses in these cases, whose testimony led to these tragedies, would seem to be in accordance with sound psychology if the ruling applies in all similar cases only to the *verity* of the testimony, stopping short of ruling out the question as to whether the exciting story was told. In all cases it ought to be shown that the *story* causing

the crime, whether true or false, was actually told, and told in such a manner as to impress it as truth upon the mind of the man or woman or child, and to incite him or her thereby to commit the murder. The mental effect of a lie accepted as truth may equal that of the truth itself, and a woman or a man may lie and thereby cause a killing.

But the uncorroborated story of outrage by a woman, resulting in the death of a ravisher at the hands of her friend or relative, ought not to justify entire exemption from the legal consequences of murder.

In the case of Wm. G. Loving, tried at Halifax Court House, Va., when Judge Loving was on trial for the murder, April 22nd last, of Mr. Theodore Estes, alleged by the daughter, Miss Loving, to have drugged or intoxicated and seduced her, though the prosecution maintained, with supporting witnesses, that Miss Loving's story was false, that she was not assaulted, and that the only truth was that she had drank too much, though not to unconsciousness or inability to walk. There was no disarrangement of the undergarments or other objective physical evidences of sexual assault upon the lady.

The arraigned was given to inebriety, the medical expert, Dr. Chas. M. Emmons, of Washington, testifying to Mr. Loving having brain disease and mental derangement from excessive use of alcohol. The drunken habits of Judge Loving for many years, it was maintained by the defense, had broken him both in mind and body and that his intellect and will power had thereby been greatly impaired. Theodore Estes was unmarried, aged 27 years and weighed 115 pounds.

In this case Dr. Emmons would not say that Loving is now insane, though believing him at the time of the killing to have had brain disease and mental derangement from chronic alcoholism.

Dr. J. S. Dejarnette, superintendent of the Western Hospital for the Insane at Staunton, Va., testifying as an expert for the State, pronounced Loving angry, but not insane, on the same hypothetical biography containing the history of his inebriate habits, attempts at reformation and

cure of habit by institutional treatment, etc., separation from wife, and daughter's story of seduction and the record of the killing of Estes.

There is an element of extenuation in long continued inebriety and possible and probable deterioration of brain and mind integrity requiring a more extended analysis than the meager facts before us will justify, that should be considered in more or less complete extenuation in all cases of homicide, but which is not germane to the present inquiry and we will therefore not here attempt to discuss it.

It would not be appropos here to discuss the propriety of a young lady riding out alone, whether on a public or private road, with a young man and drinking from his whisky bottle, or of her asking for or his offering a drink to her, or of carrying such a bottle unless he were in fear of accident or snake bite requiring whisky. But it is proper to consider the psychic effect of a daughter's accredited story of sudden ravishment through such means, on a father and his immediate and closely sequent conduct. It is possible that such a father with impulsions exaggerated by alcoholic indulgence, and its morbid mental aptitudes might be in such unrestrainable state of mind and brain under all the circumstances of the Loving case as to commit an impulsive act which no power, except the Almighty, might restrain, as declared by the arraigned Judge Loving. Loving was acquitted and his counsel then admitted the innocence of his victim.

We are not prepared here to decide this question definitely. Alcoholism is a breeder and inciter of suspicion in the brains and minds of its victims, especially as of marital and erotic infidelity, and women in conjugal and amorous relations to men are often the victims of its violent impulses, as a study of the psychiatry of morbid erotism and alcoholism and the records of divorce courts plainly show.

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CHAS. H. HUGHES, M. D., Editor. HENRY L. HUGHES, Manager and Publisher.
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EDITORIAL.

[All Unsigned Editorials are written by the Editor.]

A VICTIM OF BROMIDIA SELF-MEDICATION FOLLY.
—After taking bromides for a period of five years to induce sleep, a man registered at the City Hospital as Arthur Hill, aged thirty-two, of 10 North Fourth Street, is in a cell in the observation ward in a critical condition. Hill was admitted to the hospital last Wednesday night. He was arrested on the street apparently intoxicated. He said he began the use of bromidia upon the advice of a druggist who prescribed it for insomnia. Gradually he was obliged to make the doses larger until just before his arrest he says he habitually drank a glassful of the drug, enough to kill twenty men, every night. (This statement is a hashesh delusion.)

This case is described as a victim of bromides. He is rather a victim of self and druggist prescribing folly and medical egotism. This prescribing by pharmacists should

be interdicted. The little therapeutic learning the average pharmacist acquires from the dispensatory and the reading of physicians' prescriptions, without the necessary pathological and clinical knowledge, is a dangerous thing to people who trust in them for medical advice.

Such cases are legally actionable and damages should be sought by their victims, or their friends in case they die, from taking the wrong medicine or in wrong doses for their maladies or continue the druggists's treatment till they become grossly or fatally ill before a competent physician is summoned. Physicians should not let their prescriptions go to counter-prescribing druggists.

Battle's bromidia is an excellent combination administered judiciously with medically directed skill, but no druggist should prescribe it and no patient should take it on the judgment of a druggist or at his own blind discretion. A combination of fifteen grains of chloral and an equal quantity of bromide of potassium with a fourth grain of cannabis-indica and a like quantity of hasheesh or cannabis-indica, is about as safe a mixture in the hands of a druggist with an exaggerated medical ego, as a Colt's revolver in the hands of a little child, or a case of double pneumonia or of organic brain disease in the hands of an Osteopathist or Christian Scientist.

THE CALINGAS OF LUZON described in clinical medicine by Dr. Thomas E. Moss of the Philippine constabulary, who think that heads from neighboring tribesman are necessary to propitiate the crop gods and save them from starvation are superstitiously deluded, but sane murderers. Their head hunting murderous propensity is in harmony with their superstitious nature. Yet there are pseudo experts who testify before courts that similar heinous crimes, in the criminal class, for purpose and motive are acts of insanity. Not the act itself, but the brain disease that impels it makes the insanity.

THE INSANITY OF KING OTTO of Bavaria continues and Dr. Von Grashen the Bavarian alienist continues his weekly medical attentions. The King has just passed his

sixtieth year and his malady is probably confirmedly chronic. The lucidity which appeared at times reappears no more, it is said, and a settled prognostically unfavorable dementia is said to have settled upon him.

The monarch no longer sees the relatives whose psychologically unwise visits used to irritate him. This prudent and curative custom of interdicting visits and letters to patients from the *punctum et origo* of their malady is as salutary for plebians as for kings, though not of much significance after the stage of secondary dementia sets in.

THE PURPOSES OF THE PUBLIC HEALTH DEFENSE LEAGUE are among other things, to combat indecent and immoral advertising in newspapers; the sale of alcohol, opium and other injurious substances under the guise of "patent medicines;" the practice of medicine by ignorant quacks and criminal charlatans; the adulteration of foods and drugs by dishonest manufacturers; and the mailing to our young men and women at College, of obscene printed matter under the guise of medical literature, making a base appeal to baser passions.

We are in cordial sympathy with this, a militant society, for the welfare, moral and physical, of the people.

Prompt responses have come from every section of the country, and the universal interest manifested is most encouraging.

The necessity for such an aggressive organization as the Public Health Defense League, is apparent to anyone who knows and thinks of the moral and physical unsanitary peril of the people.

We cordially send our name and dues in answer to the secretary's solicitation for enrollment.

KUROKI AND GAGES SKULL.—The skull of Phineas P. Gage with the tamping iron that was blasted through it was shown to General Kuroki at Harvard with the history of the man's recovery and a twelve year lease of life thereafter, with his intellect and ability to earn a livelihood remaining. This ought to have made a good impression on Kuroki as to the endurance of the American skull and brain.

The death of the veteran, Dr. John M. Harlow, May 15th, who was the physician of P. P. Gage, also recalls this remarkable case. It came under Harlow's care from a mine near Cavendish, Vt. Gage was tamping a charge for blasting, Sept. 13th, 1848, which went off unexpectedly sending the tamping through the left side of Gage's head; going in at the ramus of the sight and coming out behind the eye to the right of the median line and in front of the fronto parietal section. He afterwards developed inebriety and epilepsy but no aphasia.

CRITICISM OF THE RULINGS OF JUDGE FITZGERALD.

—That Justice Fitzgerald does not appreciate the rights of the insane represented by experts and maintained by other courts and insisted upon by Ray with general judicial approval, appeared again most forcefully when Dr. Evans was under cross-examination. At a certain point of the proceedings the expert justly maintained that to be forced to answer certain questions without qualification would be unfair to his professional reputation, the court instructed him sharply that it would be necessary to conform with the rulings of the court for all that. "There are some limits even to the conduct of an expert," said the judge. It may be answered there are no just limits to the qualified answer and opinion witness may wish to make.

The expert and his attorney ought then and there to have said such ruling was unfair to the prisoner, illogical, extrajudicial and unjust. The judiciary should aid and not embarrass an expert in the search for psychological fact, by allowing him to make such qualified answers as the logical rights of a true inquiry as to the existence or non-existence of insanity justly demand.

Another singular proceeding in this remarkable trial was the request for postponement in putting on one of the defendant's witnesses, in order that the prosecuting attorney might first have a conversation with him to avoid objections he might raise if the witness should go on the stand without such preliminary inspection of and admonition as to the nature of the defense's witnesses' evidence. Such admoni-

tory espionage of testimony by opposing counsel, appears egotistic, autocratic and unjust legal tyranny, also violative of the rights of the witness and of the prisoner to "the truth, the whole truth and nothing but the truth" as the oath reads in his cause as well as the duty of the witness under his oath.

Chief Justice Fuller, of the United States Supreme Court, in describing (in the *Atlantic Monthly*) Abraham Lincoln's honesty at the bar, relates how, on a certain occasion, when Lincoln, having been appointed to defend a man charged with murder conducted his case.

The crime was a brutal one; the evidence entirely circumstantial; the accused a stranger. Feeling was high and against the friendless defendant. On the trial Lincoln drew from the witnesses full statements of what they saw and knew. There was no effort to confuse; no attempt to place before the jury the facts other than they were. In the argument, after calling attention to the fact that there was no direct testimony, Lincoln reviewed the circumstances, and after conceding that this and that seemed to point to defendant's guilt, closed by saying that he had reflected much on the case, and while it seemed probable that defendant was guilty he was not sure, and, looking the jury straight in the face, said, "Are you?" The defendant was acquitted, and afterward the real criminal was detected and punished. How different would have been the conduct of many lawyers! Some would have striven to lead the Judge into technical errors. Others would have become hoarse in denunciation of witnesses.

The simple straightforward way of Lincoln backed by the confidence of the jury won. And this and other like methods, let me add, secured for him the name of Honest Abe.

The Lincoln method was not practiced by the prosecuting attorney in the Thaw trial. Thaw and his experts were not given the benefit of the doubt through any suggestion or admission of the prosecuting attorney or rulings of the presiding justice.

The following noteworthy occurrence evincing indefen-

sible bias and prejudice against an expert on insanity on the part of the prosecuting attorney is here recorded from the press statements made at the time; Dr. Charles H. Wagner superintendent of the Binghampton Insane Asylum, who had just been a witness for the insanity of the defense, tried to describe a visit to Thaw in the Tombs on December 19th, when he was accompanied by Dr. Evans, superintendent of the Morris Plains Asylum and some of the defendant's lawyers. Mr. Jerome objected. He did not permit any of the conversation on which the conclusion of the expert was based. The witness turning to Justice Fitzgerald said he could not go on when the court broke in with "Well you can't testify."

During the short recess District Attorney Jerome walked out of the court room and lit a cigarette.

Doctor Evans expert for the defense extended his hand to the District Attorney in the corridor who ignored the doctor saying he did not think the doctor was a truthful man. "Well you are no gentleman" said Doctor Evans. Mr. Jerome then walked away and the incident was closed.

A good deal of feeling to inject into a case, against a witness in behalf of a man whose life was at stake, in the balance between possible insane exculpation and the vengeance of the law.

This rude remark was made to an expert of merit whose testimony was based on real clinical experience in psychiatry, and on personal examination and conclusion, not to one of those crude, egotistic, pseudo experts who, without justifying clinical experience and adequate and right study of the case and just capacity and opportunity in clinical experience for right reflection thereon and comparison of the sane with the insane, boldly rush into forensic psychiatry, as illy posted lawyers sometimes do and pose as psychiatric experts, only, to betray, in their testimony and on cross-examination their ignorance of the subject, to the harm of themselves and the cause of that exalted branch of medical science, real psychiatry, which

has its foundation in extensive knowledge of the human mind under the perverting influence of disease.

Since the above was written February 15th more liberal rulings in behalf of testimony appear in this trial.

SHALL STATE GO BACKWARD WITH ITS INSANE.—“Every state hospital for the insane in Illinois is so overcrowded to-day that, unless more room is provided, it will be necessary to return insane patients now receiving state care to almshouse care. This most unfortunate step can be avoided, and curative treatment of the highest approved value can be provided for all the insane wards of the state, if the forty-fifth General Assembly and your excellency approve the recommendations of this board in its 19th Biennial Report. In the name of humanity and progress, we, as members of the state board of charities and as individuals, recommend complete state care for the mental defectives of Illinois at the earliest practical date.”

The day of the dement cribbed and confined or chained to an outhouse or cellar floor should pass forever from this enlightened land. For striking off their chains Chiarage and Pinel became immortal.

A RHAPSODY ON EXODY.—The *St. Louis Times* utters the following rhapsody on the season's exodus of Americans to Europe which will be appreciated by those globe-trotters who have seen the attractions of both the old and new world and found, after all, that there is no place like the home land for sights of grandeur, beauty and glory.

“Now are we upon the time when our friends possessing the price are wont to look up sailing dates, to make agreements with the man from Cook's. We find in the lists furnished by the steamship companies many familiar names. We say good-by to friends who will soon be traversing the Via Appia, mounting the crags of Scotland or sitting up with the midnight sun at Trondjheim or North Cape.

“Sailing out of New York or Boston or Baltimore harbors is a pleasant diversion. It is likewise amusing and

somewhat instructive to watch for whale and porpoise while playing the shuffleboard on the deep briny. It is lovely to stand on London Bridge when it is not falling down and to drive through the Latin Quarter looking in vain for an artist with a ragged coat and the shimmer of genius gleaming through unkempt hair. It is perfectly charming to see where the Princess died in the Tower, and it is more than entrancing to smell the decaying vegetation that makes the canals of Venice give up an odor like unto Chesley Island in the good old summer time. We know of nothing quite as compensatory as the stifling heat of Water-port street in Gibraltar or the fly-populated spaghetti that makes for local color in the environs of that dear old Naples.

"All of these things are good, But of the throngs that go to Europe every summer, raising the rents of Paris and the price of Southdown mutton in the grill room of the Hotel Cecil, how many know of the grandeur of Golden Gate and the myriad geysers of Yellowstone Park? How many have floated down the rough bosom of the Columbia, the Rhine of America, from the Dalles to the confluence of the Willamette? How many have shot the rapids of the St. Lawrence and how many of those who fly to Europe have stood beneath the shade of a tree 3000 years old in the land of the redwoods? Where is there in Europe the mountain scenery that compares in extent and variety with what Colorado, all to itself, has to offer?

"We commend Europe and the instruction of travel there to the fortunate who can foot the bills, but we take the liberty of suggesting that America is the real wonderland and that to view it first is not only a patriotic duty, but a way of fixing high standards that the older world will have difficulty in matching.

A DEADLY LIVELY.—A telegraph operator twenty-five years of age, as S. V. Lively was, deprived of sleep and working Tuesday, Wednesday and Thursday night and day without rest—seventy-two hours—becomes deadly for sleep. No wonder that terrible Florence, Colorado, R. R.

collision happened last year, and later ones have occurred since from similar cause, as in Texas. If no better provision is made for good and daily well-repaired mental machinery of telegraph operators the trains had better stop running, and people quit traveling by rail.

THE ST. LOUIS CENSOR AND THE THAW TRIAL — The *Censor* of this city, makes the following comments on Thaw, his chief attorney and his jealous enemies in the legal profession, and Judge Fitzgerald, who presided in the famous case, captioned "Bumptious Provincialism."

"When it was announced that Delmas was to conduct the case, the envies and jealousies and meannesses of the big city began to bristle. New York knows it all; nobody who lives outside of New York has a right to know anything. The presumption of Delmas in coming to New York was an insult, not only to New York's bar, but to New York itself. It wanted to see him fail, and it did all it could to defeat him. Jerome realized this prejudice and took advantage of it at the beginning by playing the part of a legal ruffian toward Delmas. Beyond doubt, Justice Fitzgerald was saturated with this prejudice at the beginning, and ruled uniformly in favor of Jerome, until the unfailing courtesy, urbanity and marked ability of the San Franciscan seem to have won him entirely. The press was imbued with the prejudice. They never lost an opportunity to give Delmas a sly, spiteful, little dig.

"The hypothetical question framed by Hartridge, Fitzgerald refused to admit, while Gleason, in placing Dr. Wylie on the stand, furnished Jerome his only triumph and almost broke down the case of the defense at its very opening. The action of these men in blaming the disagreement of the jury on Delmas is thoroughly contemptible. It shows the odds against which Delmas contended, for every one of these men, sitting behind him and supposed to be helping him, were betraying him and his and their client every hour of the trial. They would have secretly rejoiced in a first degree verdict, for that would have discredited the man whose misfortune it was—or should we say crime?—of not being a New Yorker.

"The well nigh too heavy handicap carried by Delmas was that he had a fool for a client—a *headstrong, degenerate, ego-maniacal fool*, if not a lunatic, who in his bone-headed folly was governed by the notion that his money rendered him a superior being—a fool who had always been spoiled by having his own way absolutely, a fool with but a glimmer of reason, no knowledge of law, logic or anything else much, but yet who insisted absolutely on directing his own defense. This obstinate egomaniac has made all kinds of changes in his counsel since he committed his crime, putting first one lawyer then another to the front as leading counsel at a critical stage of the trial, and ordered him to dismiss Dr. Hamilton after he was on the stand, as he didn't want it shown that he was insane now or when he shot White. For this fool is said to have been thoroughly convinced, that on the ground of the unwritten law, the jury would acquit him without leaving the box! Jerome saw how matters were going and was entirely right when he charged that the fool was incapable of directing his counsel.

"The fact is that Delmas won a great victory when he secured a hanged jury. He did well to defeat a first degree verdict. However, the employment of Delmas to conduct the defense was a mistake solely on the ground of New York's dense, ignorant, unthinking, crucifying provincial prejudice. Not the most remote village in all the land is more provincial than this great city. There is nothing quite so insolent, egotistic, self-satisfied and insulting as this provincialism on earth. At least two millions of the city's population know nothing about the balance of the country and care less. A great many New Yorkers are convinced New York has furnished all the men of light and learning the country ever had.

"The appearance of a lawyer from San Francisco was an insult to all New York—an insult which is now being resented with bumptious, bigoted vigor."

INSANITY AND RESPONSIBILITY.—According to the *Buffalo Medical Journal*, a citizen of Kentucky was recently

placed on trial by a jury at his own request and sent to the asylum on his own testimony. He said that he had distinct impulses to kill his wife and children and burn his house and then kill himself. He feared these impulses would be so strong that he would be unable to resist them, hence his application to the court to be sent to the asylum, which request was quickly granted. He manifested great joy that he was to be restrained in such a manner that his wife and children would be safe. Such a case, says the *Journal*, as this raises the point as to accountability, particularly as to the right and wrong test. If this man had killed his family he would have been held legally accountable under certain applications of the right and wrong test, which holds that if the man knows the nature and quality of the act and knows that it is wrong, then he is to be punished. The fact that he recognized the act as wrong showed that he was rational, hence the court committed a man to the asylum who was rational, a gross miscarriage of justice, though it possibly saved lives.

RIGHT, MR. TIMES.—“An ancient parchment lying before us says that ‘good whiskie preventeth the veins from crumbling,’ whereupon we arise to disagree by quoting present day pathology, which says that arteriosclerosis arises not infrequently from a too copious application of alcohol inwardly.”

You are right, Mr. *Times*, but there are times of limited duration, when a timely draught or two administered with due medical precaution as to dosage and repetition “doeth good like a medicine” in arousing a flagging heart and in widening an anemic arteriole and flushing with more blood and increasing the lowering blood pressure to a failing anaemic neurone.

There is a temporary salutary use medicinally, but not as a beverage, for whiskey even in preventing the “veins from crumbling” so to speak, through the very arteriole dilations that drink induces in certain cases.

IMPROVED HEALTH CONDITIONS ON THE PANAMA CANAL ZONE.—From Chief Sanitary Officer, Col. W. C.

Gorgas' report to the Chairman of the Isthmian Canal Commission we glean the following important information: Health conditions on the Isthmus of Panama during the year 1906 have been very good. During that period we had only one case of yellow fever—a fatal case which occurred in May. Two deaths were from smallpox. A fatal form of pneumonia has prevailed among the negroes, affecting the white force to a very small extent. In a total of 1,105 deaths among employees from all causes, 431 were due to pneumonia. The epidemic of pneumonia commenced in October of 1905, and reached its maximum in July, 1906. These statistics for the year 1906 show that the health of the force as a whole has been kept at about what it would have been if working at home; especially among the white American employees, and that yellow fever has been eradicated.

ANTIVIVISECTION DEFEAT—THANKS TO DR. S. WEIR-MITCHELL.—The bill to prohibit vivisection in Pennsylvania was dropped from the legislative calendar of that state, after an address in opposition to the measure by Dr. S. Weir-Mitchell.

A measure to prevent undue cruelty and to stop public school vivisection and prolonged anaesthetized torture in non-scientific and unhumane hands would be approved by science. The heartless college students who can complacently torture animals to death, or abandon them to die, as was done lately in St. Louis, just to see them writhe, with no definite scientific object in view, deserve condemnation and punishment, and they should be prevented from indulging the instinct of cruelty. Vivisection should be permitted only to real and humane students of physiological science and under restriction to the true necessary purposes of science and under right precautions, such as prevail in the profession regarding antisepsis and anaesthesia. Not by callow youths for cruel curiosity and the fame and infamy of deliberate and aimless brutality.

A PITIABLE COCAINE SLAVE, miscalled a fiend, was before one of our city courts and fined for what the ignorant judge called his crime and his fault. He raved

and was violent after his arrest because the drug was out of him and its absence left him crazy.

A moderate restitution, honored judges, of the brain-damaging and mind-distorting drug and gradual withdrawal and suitable medical treatment with an added generous dose of liberal judicial and custodian official charity would restore these unfortunate, unkindly miscalled "fiends," to normal mental poise and freedom from their now almost fatal thralldom, as they are now treated under present day court and custodial ignorance. The "cocaine fiend," as he is cruelly called, is a psychopäthically sick person, needing sympathy rather than censure, care rather than curses. What is true of the cocaine habitue, gentlemen judges, jailors and policemen, is true of the opium slave, the dipsomaniacal inebriate and some other drug enthralled. The term "dope fiend" was never conceived in charity, but in ignorant malice, malevolence and uncharity. Not fiend but fated without another's help.

Consult De Quincy's "Confessions of an Opium Eater" for a record of an "Iliad of Woes," which only medical aid can relieve, or learn of the many sanitariums advertised in the pages of the ALIENIST AND NEUROLOGIST for more light on the miseries and claims for commiseration of these unfortunate victims of the automatic drug dominance over the once free but now enslaved will. Angels of mercy and ministers of grace! why are these psychically frail, pitiable creatures permitted to fall into the hands of the ignorant, who punish them by deprivation and violence for erratic displays of delirium, when their drug is out. No less difficult of self-control than the convulsion of epilepsy. It is high time that health boards and public officials should know the medical needs of these unfortunates and supply them with charitable skill and tender consideration.

"A cocaine joint" has been found by the police where a negress purchasing cocaine from druggists resold it to amateurs in cocaine indulgence, and furnished quarters for indulging the habit and its peculiar orgies. Some arrests followed, but the gravity and peril to normal mentality of

this vicious indulgence will not be rightly appreciated and dealt with till health boards and police departments better understand its degradation and dangers to the mental stability of its habitues and the imminence of neurotic degeneration following in the wake of this terrible form of inebriety.

CRUEL AND ABSURD TREATMENT.—Edward Murphy, alias Edw. Quinn, attempted suicide in the holdover in the four courts, St. Louis, by hanging himself from the top of a cell with a rope made from his shirt.

Murphy was fined \$100 April 10 by Judge Tracy, who stayed execution, providing Murphy would leave the city.

When arrested again Murphy carried on like a maniac, tearing his clothing from his body. He ended by trying to hang himself.

Two turnkeys prevented him from accomplishing his design. He fought three big policemen for a long time before he could be subdued and taken to the city hospital. He was suffering from cocaine poisoning.

When courts thus ignorantly decide medical questions, without right medical counsel, where are the rights of the afflicted? Oh, Egotism, how often is thy name law! and thy tyrant executive the petty, ignorant tyrant on the bench of a court of justice!

THE TIME IS NOW PROPITIOUS for a new departure in the education of the young medical man. Let him be taught that he is an important factor in the economic development of this country. He has an inalienable right to demand the enactment of laws which he alone knows ought to exist on our statute books for his own and for the public's protection. In France, in Switzerland, in the German States, a medical man receives respectful consideration in this regard. He frequently is a member of the parliamentary body, and is an important factor in legislation. When the silly prejudice existing in this country against the participation of physicians in civic and national reforms disappears, we can hope for the same conditions here. It is to be hoped that when finally the subject of medical

economics will be introduced into the curriculum of every medical college in the land, it will assist in bringing about the above consumation—so devoutly to be wished.—*Cincinnati Journal*.

THE NUDITY FAD for children promulgated by Prof. Starr, of Chicago, is an anachronistic renaissance of nakedness not suitable to our latitude or time with its rapid changes of weather and fashion, save in some exceptional days of the summer solstice, and not suitable then for our often too early developed erotism between the sexes.

It is however, true that people in the vicinities of Chicago, St. Paul, St. Louis, New York, Boston, Philadelphia, New Orleans, Memphis and other of our cities go away from the hot weather too soon for their welfare. They do not avail themselves long enough in the summer season of the healthful opportunity to perspire and give the sweat glands a chance to relieve the kidneys of a part of their prolonged vicarious water eliminating work or take due advantage of the chance to dress themselves as diaphanously as they might and should, excepting always our ladies in ball-room, opera and parlor costume.

Infants and children are often over clothed, sometimes under clad, but we are not yet ready for costume reversal to the habiliments of South American barbarianism, and the Professor does not even countenance those suggestions of budding barbaric or primeval modesty as seen in the concealing breech-clout or the fig leaf as the latter is pictured on our first parents in the garden before they went out together troubled in conscience and in search of a change of diet and wearing apparel. They were early disciples of the nudity fad, but they and their children came, after a time, to know better, through the forbidden fruit case. History repeats itself, and the same thing is liable to happen in Professor Starr's nude "kindergarten."

JUDICIAL MISCONCEPTION AND WRONG DEFINITION OF A WOUND AND OF INSANITY.—In the case of J. B. Thompson vs. the Fidelity and Casualty Company, the

United States court of appeals has declared that the meaning of a "wound" is an abrasion, breach or rupture of the skin. The skin must be broken, or there is no wound.

Therefore a person who is beaten to a pulp with sandbags or stuffed clubs may not be wounded, if his skin be not broken.

At once we see vast opportunities, and proceed to load a piece of rubber hose with lead in anticipation of the visit of the collector. We shall not "wound" him, but will make hash of his interior. His heirs and assigns may prove a case of simple assault against us, but no deadly attack. And so may we deal with all enemies to our peace and dignity. A brick in the midst of the sofa pillow will lend joy to the occasion of a social evening. We will break skulls, but no skins.

Surgeons and lexicographers may argue until doomsday that the victims are dead, but the law, which speaks the last word, will say that there can be no "remains" where there is no wound. Daniel and not Noah Webster is the final arbiter of language and life, for life is but the interpretation of words. The law must decide, and the law is authoritative.

But we grievously fear that between the law and Christian Science this material world will soon wholly vanish. They are getting together on so many points as to actual hurts and actual death. They will leave us, soon, no realities—only "Science and Health" and the "revised statutes." Perhaps Mrs. Eddy will yet adorn the supreme bench, and decide, what the law seems to contend, that all our social and political ills are but "mortal mind."

A St. Louis city paper thus detects and exposes the fallacy of the U. S. Court of Appeals idea of a wound, "an idea characteristically judicial, but fallacious in that it excludes almost as many injuries to the organism as the definition includes." Most of the psychical shocks, as of a man falling from a certain height and alighting on his feet, and all of many psychic shock wounds which affect by arrest, disorder and physical damage to the or-

ganism, not appreciable to the eye through skin abrasions, as arrested digestion, tachycardia, bradycardia and other shock and aepsia results, psychic icterus, diarrhea, etc. The legal definition of a wound is, clinically, as absurd as the judicial idea in some states of insanity—the rulings in the Thaw trial, and the New York statutes for instance, that to be insane one must lose the knowledge of right and wrong, when the insane asylums furnish ample proof that many insane knowing right from wrong yet do the wrong under morbidly imperative conception and psychopathic impulse as resistless as an epileptic fit or stroke of paralysis.

Psychic brain disease is no respecter of law's definitions or court's rulings. Expecting a lunatic to conform to such legal regulations as to what shall constitute legal insanity or go to the electric chair or scaffold, is like demanding physically upright deportment of idiocy and right walking of scoliosis, a splayfoot or a sprained ankle. Disease of brain or body is a law unto itself which courts can not treat.

FAILURE TO RECOGNIZE NERVOUS INFLUENCE IN HAND-WRITING by chirography experts socalled has been the cause, and still is, of many errors of conclusion, for the hand-writing varies under varying brain states, like the vision which some oculists do and some do not adequately recognize. But at Newark, June 22nd, at a hearing before Vice Chancellor Emory there was admitted in evidence a statement from W. W. Winner, a hand-writing expert, to the effect that certain letters alleged to have been written by Fannie J. Meyer, defendant in a divorce suit brought by Charles A. Meyer, actually were written by Mrs. Meyer.

They were addressed to Ross Neary, a private detective. It is said they contained incriminating statements. Winner's finding was in part that "the letters were written by the same hand that wrote the standards furnished him for comparison. In fact, there is no attempt to disguise the handwriting in any case, and whatever apparent differ-

ences exist are due only to mood and influences of the nervous system at the time of the execution of the writing."

LABOR'S RIGHT TO REST is natural and physiological and should not be abridged by over long hours either on week days or on Sundays. Plain meals and self-served alcoholics give waiters, chefs and dispensers of drinks and saloon owners a chance to rest, recreation and acquaintance with their families. The Sunday "lid" is neither a church question nor an anti-liquor question. It is a question as to the right of workers in the liquor interest to a rest time off duty, such as other workers enjoy and need. All work and no relaxation is neither healthful to body or mind. Yet St. Louis witnesses the anomalous action of the West End Improvement Association in awarding and applauding the vicious sentiment of unceasing work for liquor dispensers and saloon owners. They have rest rights and demands as well as others.

A WOULD BE PATRICIDE OF ST. LOUIS was lately judicially sentenced to two years in the penitentiary and paroled under a peace bond, after being told to stop smoking cigarettes. A boy eighteen years old, who pleaded guilty of shooting his father in a passion during a quarrel over a small money claim he had against his father.

A lunacy commission reported him sound of mind at the time, though it said he may have been mentally unbalanced at the time of the shooting.

This boy admitted smoking thirty cigarettes a day.

The latent psychopathic instability in these cases requires a term of more restraint and habit regulation which an insane asylum gives better than any penal institute. The state needs midway establishments between the lunatic asylum and the juvenile reformatories where such aberrant youths might be segregated and trained in self-restraint. They are psychopathic and need a residence in a psychopathic or paranoid hospital and a commission of level-headed physicians skilled in determining the insane and the spasmodic diathesis should decide whether they

should or should not be emasculated, to save the race from the possibility of more of their pernicious kind being engendered.

This cigarette boy with a brain storm propensity to kill even his father and who meant to kill him, should not have been turned loose on bond. A bond is no security against hypokinesia. The morbid brain storm knows no law but the law of physical restraint.

A BEE STING CAUSING FATAL TETANUS is the latest report, through the secular press. The death of the boy, aged four years, is reported as occurring in Philadelphia, July 26th, ten days after the sting. The name is Ralph Foy. Physicians have so diagnosticated the singular case. We should like to know more of this case.

DR. KUHN is the name of the new superintendent of the State Hospital for the Insane, Number One, vice Dr. Woodson, resigned. Dr. Kuhn promises innovations and reforms, but they have not been detailed to us. It is promised that the welfare of this institution of the Northwest will not suffer by the change.

A VISION AT THE VATICAN accompanied with an auditory hallucination of the Madonna del Carmine is announced as having occurred to the present Pope Pius X. This cerebral hyperaemia affecting the visual and auditory centers of his Holiness' cerebral cortex is said to have been caused by the brain-strain of tension between the vatican and a large section of the German Catholics. Constantine the Great also had troubles and hyperaemic vision of the conquering cross. Likewise Mohammed saw and heard the invisible and the voices.

A DELUDED CHRISTOPATH lately leaped from a third-story window in New York and died. He imagined himself endowed like a bird or angel to fly, though he had no wings. A patient of the editor's, before the insanoid priestess of Christian Science inspired to such folly, attempted to fly from the top of his barn, with crude artificial wings attached

to his arms and landed on his head in a dung heap and in the lunatic asylum the next day. Both had better have been placed in such an institution before their calamity befell them. The first case showed too much consciousness and remembered detail for epilepsy and in the second there was no such suggestion and no sign of epilepsy. The latter remembered all the circumstance and when convalescent said he had been a fool, which was true, with the qualification that brain disease caused the act of flying folly. Such folly should be shot before it flies.

SOMETIMES IN OUR SOCIAL LIFE we see the erratic working of the unstable neurone on its way to greater degeneracy of function in chronicles like the following: "She married a man prominent in his county politics and society, and now a well-known horticulturist. Later she developed erratic tendencies, was divorced, and is now wedded to a Chinaman." The divorce courts of America are also fateful illustrative warning revelations in this portentous direction.

THE UNSTABLE NEURONE AT BLEES ACADEMY, Mo., was lately in evidence in the unsoldier like insubordination of one or two cadet officers followed by an unmilitary mutiny of a silly part of the class of kids because of the enforcement of lawful discipline when, in all military organizations, the first and most honorable and essential duty of a soldier real or mimic, is to obey orders and maintain the force and effectiveness of the command. The neuronc instability in this case, however, did not reach the faculty.

THE FARMER'S WIFE AND INSANITY.—From the country districts women generally preponderate in numbers in the insane hospitals. The reason thereof may be found as we have before said, in the isolation of routine, and the monotonous and solitary life of the woman. She is last to bed and first up in the morning, unremittingly occupied all the time, and overworked in harvest time. If there are protracted revival meetings in winter, she entertains the preachers, prepares meals or supervises them, and looks to the ways of her household late and early. She has not the diversions of

the husband. She attends no stock sales, no "destrick skule," no political gatherings, goes seldom to town to make purchases and never to the great city to dispose of the products of the farm or purchase implements of husbandry and have a social time away from home with friends, as her husband does. She walks the treadmill of daily routine onerous duty alone and carries without the aid of diverting social companionship or change, her wearing monotonous life burdens, relieved of household cares only by additional burden of preparing for an increase in the family, by child-bearing, lactation, child rearing and new care and solicitude for a "new member of the family." Race suicide is no part of her thought or creed while blind indifference to his wife's life shortening, or insanity ending burden, marks the thought and demeanor often of the pater familias as, in the early morning, or at even tide, resting from his daily labor, (his wife still at work,) he meditates on the profit of the coming or the garnered crop, thoughtless of the psychic suicide he is helping his wife to commit. For "evil in this world is wrought by want of thought as well as by want of heart."

Farmers wives and farmers daughters in a state like Iowa lead strenuous, exacting, self-immolating lives. They work too much and have too long hours and too little diversion. A man brought his wife to me and said doctor, I cannot account for my wife's insanity. She was such a good faithful wife. She always kept the house in order. There was no foolishness about her. She never went anywhere. I said to him that was the reason she lost her reason. Her life was too solitary and too sedentary and without rest or diversion.

SCLEROSED BLOOD VESSELS (NEW VIEW), according to Senator, deprived of their chalk are liable to suffer loss of resistive power. The withdrawal of the chalk, which, nowadays is put forward as the rational way of treating arterio-sclerosis, forms no cure of the disease, according to this logical observer.—Vide selections.

THE ARIZONA MAN-WOMAN.—The sexual identity of De Raylan, the Arizona married man-woman, has been established. Baron Schlippenbach, a Russian at Chicago, was the most important witness in identification.

The woman simply was a pervert, a monomaniac on sex substitution. The surgeons at the post-mortem examination, found an abnormal adhesion of the brain matter to the skull. There is nothing in the speculation that De Raylan took male attire because of crimes committed in Russia, compelling a disguise for safety. Though he had known her for twelve years he had never had a doubt about her being a man.

De Raylan's naturalization as an American citizen becomes void, and she remained a Russian subject. It becomes the duty of the Russian government to see that his (her) estate is properly administered. A search for possible heirs is now in progress in Russia. There seems only one clew, and that is a letter, with a photograph, from a woman in St. Petersburg, who seems to have been one of De Raylan's many sweethearts.

A PECULIAR DISPLAY OF PSYCHIC EPILEPSY.—Dr. Marc Ray Hughes, Professor of Mental and Nervous Diseases in the Barnes University, now Medical Department of the State University, had a peculiar experience with a case of this kind on a street in St. Louis. A negro in the precursory stage of an epileptic automatic seizure, grabbed him about the neck from behind as he passed under an awning, throwing his arms about the Doctor's neck unconsciously, after the manner of a double "strong arm" hold-up. The incident happened in broad day light on a much travelled street. The Doctor's first impression was that some part of the awning had struck him, but being a neurologist he soon took in the situation, the succeeding mental confusion, incoherency and semi-catamose condition revealing the disease. A peculiar coincidence was the fact that Dr. Hughes had just left his clinic where he had been lecturing upon and demonstrating a case of epilepsy. The possible medico-legal significance of a case like this

will be apparent to the alienist expert. The unique displays of psychic epilepsy are many, far more than Hughlings Jackson or other writers on epileptoid have yet described. Here, as in grand mal, they may be more unique than the "antic postures of a merry-andrew.

A RELAPSE TO BARBARISM in the treatment of the insane, is reported by the Board of Supervisors for Stephenson County, Illinois, of a Freeport almshouse insane patient, demented and attenuated to eighty or ninety pounds, and chained by her bare feet to a cell, to control her insane habit of stamping on the floor at nights. These chains had been thus kept on this patient for several years for this purpose. Shades of the humane Pinel and Chiarugi! when shall some people who manage almshouses become sufficiently humanely considerate of the brain distorted poor to send them to the insanity hospitals.

Illinois has not too soon passed a law emptying all of her insane into the proper sectional hospitals.

THE DEATH OF THEODORE TILTON recalls the unreliability of a wife's testimony on a question of erotism where the husband is involved. She testified both for and against her husband in the famous Tilton-Beecher scandal trial.

PROMOTING THE UNSTABLE AND CONSERVING THE STABLE NEURONE.—Conjugal fertilization of psychopathic ovaries with neuropathic semen transmitting the unstable diathesis, is bad enough for the human race, but to add to it the cultivation of erratic propensities in our colleges, by permitting badly born and minded youth to indulge ludicrous, cruel vagaries of conduct is worse. It feeds an inherent fatal hereditary neuropathy on its wrong way through life. It should be the aim of our colleges to correct or stamp out hereditary psychopathic tendencies to wrong conduct.

The psychopathic diathesis is not a desirable element for the brains of American college bred young men. It is a foolish young man, who glories in bizarre and often

cruel psychopathic stunts and paranoid speech and conduct as displayed in many present forms of hazing. *Mens stabilitatis et mens caritatis* might be a good motto for the fraternities, the school and the campus at Columbia, Missouri, as well as Columbia, New York, not to mention others.

The best outcome of a modern University would be level heads and a steady brains. Neither overstuffed with knowledge and conceit nor lacking in conception of and conformity to the proprieties and stabilities of normal psychic function.

The abnormal expenditure of the unstable nervous energy of psychopaths and neuropaths is not always and inclusively displayed in convulsions, hysteria, insanity, tremors, etc. With paranoid leaders it may appear in extreme hazing.

SUICIDE PACTS, etc., like that of the late sextuple tragedy among members of an Iowa suicide club of ladies, the youngest victim of this form of braininstability being twenty-three and the eldest thirty years old show a discouraging evolution of the unstable neurone in our seminaries for girls. These ladies lived in different parts of Iowa, were graduates of either the State University or State Normal School and were brain overstrained daughters of well-to-do farmers. All took the same poison (carbolic acid) at the same hour (8:00 A. M.) of different days between Monday and the following Friday, May 17th, 1907.

The note of one Miss Carroll read: "To dear ones: Good-by. I am dying. I swallowed poison. I belong to a club. Miss —— is president. We all of us take poison together. Good-by."

The name of the president was obliterated after she had written it.

It has been discovered, the suicides began on Monday when Miss Belle Wilson, living near Council Bluffs, took carbolic acid. She died on her knees, and before she left the breakfast table to go to her room remarked she could never lead a good enough life. Miss Hannah Tomlinson of Newmarket, Ia., following took acid, saying life was not worth living.

THE WEEKLY MEDICAL REVIEW has become a monthly. A strong man vacated its tripod when Milliken left it for a larger place on the A. M. A. We wish the *Review* continued prosperity without premature menopause, with Dr. Warfield as a worthy warrior for its welfare.

The journal of the A. M. A., with the addition of Milliken's virility joined to the psychic fecundity of Brother Simmons, will continue to bear good fruit.

A CASE OF FOLIE RAISONANTE—COMMITTING A SANE MAN TO AN ASYLUM.—It is reported from Council Bluffs, Iowa, that an officer of the Omaha police force spent an hour in St. Bernard's Insane Asylum, at Council Bluffs, while the insane man whom Maloney had taken to the asylum walked away a free man, after convincing the asylum authorities that Maloney was the crazy man and that he himself had brought him to the place as a patient.

Maloney started from Omaha with the patient and arrived at the asylum safely. The patient was not violent and wore no shackles. Within the building, as Maloney and his man entered a private room, the lunatic shoved the officer into the room and locked the door from the outside. Then he turned the key over to the authorities, telling them to watch their man closely. Afterwards he calmly walked out of the building and disappeared.

Maloney insisted that he was the officer and became violently angry because he was kept a prisoner. Finally he asked that the Police Captain of Omaha be telephoned for. The Captain arrived and Maloney was then released. The lunatic has not been re-arrested.

STATE FAIR—NEW FEATURES.—The management of the State Fair to be opened at Sedalia, October 5th, will offer prizes for Automobile races and many of the speediest machines in the state will enter these contests. The great mile track 80 feet wide will furnish these machines a magnificent course, and phenomenal speed and exciting contests are assured.

Prizes are offered for the best Fraternal Drill Team,

both for Gentlemen and Lady teams, and these exercises will form an attractive feature. A number of teams have given notice of their intention to contest for these prizes, and close competition will add interest and excitement to the exhibition.

THE AMERICAN ASSOCIATION FOR THE STUDY OF THE FEEBLE-MINDED held an interesting and instructive session at Waverly, Mass., June 5th, 6th and 7th. 1907.

Following is the program, under the presidency of Dr. W. H. C. Smith, of Godfrey, Illinois: Address of Welcome; Col. W. W. Swan, President Board of Trustees; Brookline, Mass. Response. President's Annual Address; Dr. W. H. C. Smith; Godfrey, Ill. "Notes on the Order of Birth of Mongolian Idiots;" Dr. J. C. Carson; Syracuse, N. Y. "Some aids in Administration;" E. R. Johnstone; Vineland, N. J. "Training Schools for Attendants for the Feeble-Minded;" Dr. Chas. Bernstein, Rome, N. Y. "The Operative Treatment of Spastic Deformities in Feeble-Minded Children;" Dr. E. G. Brackett; Boston. Clinic and Stereopticon Demonstration of Cases of Mental Defect; Dr. W. E. Fernald; Waverly, Mass. "Reading and Language;" Miss Charlotte Hoskins Miner; Orange, N. J. "A Child Who Hears, Yet Cannot Talk;" Miss Margaret Bancroft; Haddonfield, N. J. "Some Special Types;" Miss Fanny A. Compton; St. Louis, Mo. "Methods for Speech Development Employed in the School;" Miss Florence Boyd; Haddonfield, N. J. "Suggestions Concerning the Psychology of Mentally Deficient Children;" Prof Naomi Nosworthy; Columbia University, N. Y. "Psychological Work Among the Feeble-Minded;" Dr. Henry H. Goddard; Vineland, N. J. "Some Cases of Mental Defect from an Out-Patient Clinic;" Dr. J. J. Thomas; Boston. "Demonstration of a Series of Defective Brains;" Dr. E. W. Taylor; Boston. "The Special Classes for Mentally Defective Children in the Boston Public Schools;" Dr. David F. Lincoln; Boston. Demonstration of Gymnastic work, Competitive Games, etc.; by the School. Visitation to Templeton Colony.

SELECTIONS.

NEUROVASCULAR PATHOLOGY.

SENATOR ON THE CAUSES OF ARTERIO-SCLEROSIS.

— From an anatomical point of view accurate knowledge of it is still of recent date, for it was only towards the middle of the last century that the changes which led to what is called arterio-sclerosis were minutely investigated by Bizot, Rokitansky and Virchow. By these and later investigations it was shown that under the name of arterio-sclerosis, or a deposit of chalk within the walls of the arteries, no one single hard and fast anatomical process is understood, but that we have also to do with certain precursors partly of an inflammatory and hyperplastic and partly of a degenerative and necrotic nature, and that it is these latter which in their further course lead to the deposit of calcareous matter within the vessel walls. We are told that these morbid processes begin sometimes in the tunica intima and at others in the tunica media, and that it is only by a later sequence that they extend to the other coats of the vessel walls. It is also probable that the starting-point is a different one in the various circulatory regions, one for the Aorta, another for the smaller arteries. In the Aorta, for instance, the changes certainly begin in the intima, under the form of *endaortevitis deformans chronica* (Virchow). In every case, and this is beyond dispute, the deposition of chalk is a secondary process, *i. e.*, the calcareous material is only deposited in the walls of vessels previously diseased, and it thus follows that even in the event of our being successful in freeing them from the calcareous deposit, they do not by any means become healthy vessels. On the con-

trary, diseased vessels which have been deprived of their chalk are liable to suffer loss of resistive power. In any case, the withdrawal of the chalk, which nowadays is put forward as the rational way of treating arterio-sclerosis, forms no cure of the disease. It would be well to point out here that it is very doubtful whether chalk once deposited in the vessel walls can be removed by any means at present at our command.

We use the term arterio-sclerosis in its clinical sense as applied to such arteries as, owing to their position are palpable or visible, are found to be thickened, rigid, and in more advanced cases even tortuous. When matters have advanced so far that arterio-sclerosis can be recognized clinically, then it is extremely probable that not only the intima and muscularis, but also the adventitia are involved. The early beginnings of the disease cannot be recognized clinically with certainty, but in most cases its presence is to be presumed from certain aetiological data and functional disturbances. Among early signs great importance is generally attached to an increase in arterial tension. According to my experience this sign is a very inconstant one in arterio-sclerosis and indeed depends greatly upon the condition of the heart. Apart from the fact that the rigidity of the arteries places a serious obstacle in the way of determining the conditions of pressure within them, the clinical methods at our disposal only permit of the estimation of pressure over a limited arterial sphere, and changes may occur in the capillaries and in the arterioles in quite another sense than in the aorta and the large arterial trunks, in the peripheral spheres than in the cerebral and visceral.

In deciding upon a rational line of treatment we shall perhaps do well to imitate the example of the ancient practitioners of medicine, who, being unable to command the rich stores of diagnostic technique which we possess at the present time, devoted a far greater share of attention and care to therapy than to diagnosis, and who formulated definite rules and indications which should serve as a guidance in the treatment of all difficult cases.

The first of these indications is of course the *indicatio causalis*, since before everything else comes the task of dealing with the cause of the disease in as far as it can be recognized and is amenable to treatment.

The second indication may be designated the *indicatio morbi*. This corresponds very nearly to what we to-day call "specific treatment," examples of which are to be found in the dietetic treatment of diabetes mellitus, the mercurial treatment of syphilis, and the serum treatment of diphtheria.

The third indication is the *indicatio symptomatica*. If in the course of a disease any symptom becomes especially prominent and is a source of trouble to the patient, such for instance as excessive vomiting or severe diarrhœa which exhausts him, and pain which robs him of rest and sleep, the patient's power of resistance is lowered by these symptoms and the general course of his disease is unfavorably influenced. It is here that symptomatic treatment assumes importance, but even then it must be carried out with due regard to the general condition of the patient and without neglect of other indications.

The last or fourth indication is the *indicatio vitalis*. It concerns measures which are to be adopted when there is imminent danger to life itself, and requires no further description.

Considering in the first place the causation of arterio-sclerosis, it has been pretty generally accepted on the authority of Traube, Senhouse, Kirkes and Huchard, that the disease has its origin in increased arterial tension. Many facts appear to confirm this view. It is known, for instance, that a condition of high blood-pressure accompanies chronic nephritis, in which disease, as is well known, arterio-sclerosis often exists. Attempts have lately been made to give this view experimental support by artificially inducing a condition of increased aortic tension. This can be easily and certainly effected by the injection of preparations of the supra-renal body into the bloodstream. When such injections are continued sufficiently long, changes very frequently, but not invariably, take

place in the aorta which are in some respects analagous to those occuring in arterio-sclerosis. But it has also been shown that these changes may also appear when increase of pressure is prevented by the simultaneous administration of substances which counteract the effect of the first, *i. e.*, which lower pressure, such for instance as amyl nitrite, and that on the other hand they are produced by the injections of poisons which do not raise the blood-pressure at all but rather tend to lower it. It is therefore improbable that increased arterial tension alone is the cause of these changes, but some special toxic influence also plays a part. Anyhow, the changes which take place in arterio-sclerosis in the human body are not identical in all respects with the circulatory changes experimentally produced by means of the above mentioned injections. However produced, be it the result of advanced age, or owing to the effect of some exogenous injury stimulating the vessels to abnormal activity and perhaps also exerting some direct harm upon the tissues, clinical experience shows plainly that arterio-sclerosis is a degenerative disease.

Arterio-sclerosis is to be observed as a nearly physiological occurrence in old age when all the organs have become degenerated and weakened, and when there can be no question of heightened blood pressure. Its occurrence in earlier life is generally due to the effects of syphilis, or of chronic intoxications such as alcohol, tobacco, and various metals, such as lead and mercury, and also as it now appears to carbon disulphide. I am also inclined to ascribe a certain aetiological importance to the long continued use of strong tea and coffee, the extractives of meat and the products of curing, as well as to certain endogenous injuries arising from gout, diabetes and chronic nephritis, in the last of which, as Strauss has pointed out, nitrogenous bodies accumulate which are not proteids.

I am also of opinion that the development of arterio-sclerosis is favored by the excessive consumption of nitrogenous food. The disease is not infrequently seen in athletes, who in the course of their training to reduce their weight consume little carbohydrate and fat and a

good deal of meat, sausage and cheese. The custom of partaking liberally in the early morning of meat, ham and eggs, may well be one of the causes of the prevalence of arterio-sclerosis.

We know, for instance, that nitrogenous food causes the appearance of products of intestinal decomposition in far greater profusion than a vegetable diet, and it may well be imagined that by absorption of these products (to the injurious nature of which I drew attention as early as the year 1868), a condition of chronic intestinal auto-intoxication is brought about which may be a precursor of arterio sclerosis.

Finally, arterio-sclerosis is frequently to be found in people leading a sedentary life which results in their becoming very stout, and in women at the climacteric period who are notoriously disposed to obesity. It is quite possible that in consequence of insufficient movement and the constipation which is generally present and which is favored by the wealth of fat in the abdominal walls, the omentum and the mesentery, decomposition products are formed in the intestine in increased quantity, and it is also possible that increased pressure occurs as the result of sluggish movement of the blood caused by the deposition of fat and that this also precipitates the evil.—*Abstracted from Lecture of Prof. H. Senator,* of Berlin, on Causes and Treatment of Arterio-Sclerosis, in Folia Therapeutica No. 2.*

HAEMOTOXIC ETIOLOGY OF ATHEROMA AND ARTERIOSCLEROSIS.—Maurice Leoper (*La Presse Médicale*) states that atheroma and arteriosclerosis may be considered clinically as the result of slow or prolonged toxic irritations of arterial tissues. Recent investigators who have conducted experiments on some of the lower animals, have isolated from the supposed poisons substances with an action especially sclerosing or inflammatory, and others with a veritably calcifying action. The first led to the formation of sclerous endarteritis, the second group caused lesions of calcification very analogous to certain alterations of the middle coat of the human artery. Future investi-

gations will show if there are two groups of different causes to be considered in the double process of human arteriosclerosis and atheroma.

NEUROHEMATOLOGY.

BLOOD IN ASTHMATICS.—Solecher (*Meunchner Medizinische Wochenschrift*, No. 8, 1907) analyzed the blood of asthmatics and found that during and immediately after an attack an increase in the percentage number of leucocytes, the increase being solely at the expense of the polymorphonuclear variety, while the mononuclear, and particularly the eosinophile cells showed a decrease. During the free intervals, on the other hand, the percentage of polymorphonuclear cells sink as low as forty-five per cent, while the eosinophiles markedly increase.

NEUROPHYSIOLOGY.

CAUSE OF SOFT-SHELLED EGGS.—Poultry writers, since the time the Shanghai rooster first invaded Boston, have been repeatedly telling us that soft-shelled eggs were caused by an insufficiency of lime in the food consumed by the hens. Such, however, is not the case. The soft-shelled egg is a case of arrested development, due to nervous interference with the functions of the oviduct. The laying of incompletely developed eggs corresponds to abortion in mammals, and can likewise be brought about by extreme mental disturbance. In experiments conducted at the Kansas Experiment Station the writer was able to cause the production of soft-shelled eggs by continued excitement of confined hens. It was also shown that the hen's system on an ordinary diet contains enough calcium carbonate for the formation of about five or six eggs. If lime was withheld from the food, the hen after having laid this number of eggs, will stop laying. When lime was given in limited quantities the hens laid apparently normal eggs but only as frequently as the lime furnished would supply shell material. Careful weighings proved that eggs

thus produced, though apparently normal, were actually thinner-shelled than normal eggs from the same hen.—*Scientific American*.

NEUROTHERAPY.

VERONAL IN TREMOR.—Professor Combemale (*Merck's Archives*) has employed veronal in a large number of cases of insomnia from all causes, and has failed with the drug in only one patient, one with carcinoma of the stomach, where morphine could not be withheld. A new and very valuable property of the drug has recently been discovered by the author, namely, that veronal is an excellent anti-spasmodic, relieving the very severe and painful convulsions of amyotrophic lateral sclerosis in a remarkable manner. Exceptional results were also obtained in a tremor of multiple sclerosis, hemiplegia, neurasthenia, delirium tremens and cerebral tumor. If it be remembered how disagreeable a symptom in multiple sclerosis the tremor really is, the value of the drug will be evident. The proper dose here is 0.5 gm. ($7\frac{1}{2}$ grn.) every evening for several weeks.

REVIEWS, BOOK NOTICES, REPRINTS, ETC.

THE NERVOUS SYSTEM OF THE VERTEBRATES by J. B. Johnston, Ph.D., Professor of Zoology in West Virginia University. Price with one hundred and eighty illustrations \$3.00. P. Blakiston's Son & Co., 1012 Walnut St., Philadelphia.

The author lucidly and intelligently discusses Waldeyer's neurone theory, tentatively states it in six propositions, the last of which viz: that the form and position of the neurones, especially the connection and disposition of their processes determining the pathways of impulses and hence the work done by the nervous system, includes, in his judgment its entire practical value. He considers "A knowledge of how neurones are linked together in functional systems is necessary for the pathologist and psychologist. The factors which determine the manner of linking neurones are the chief interest of the social psychologist, the educator and the social reformer."

The entire book with its numerous, copious neuro-anatomical illustrations and elucidating context will entertain and repay in agreeably and profitably imparted knowledge of the authors subject any reader of the *Alienist and Neurologist*. We may recur to this valuable book again.

THE DISEASES OF THE RECTUM: Their consequences and non-surgical treatment. By W. C. Brinkerhoff, M. D., Chicago, Ill. Price \$2. Orban Publishing Company, Chicago, 1907.

Those who may have in their possession the greater works of Tuttle or Mathews or even of Bodenheimer and others will not specially need this little book, though there are some things in it which might be regarded as valuable addenda.

The author's reference to the right use and kind of rectal syringe tubes and his cautions against the evils of the enema habit are worthy of approbation and his non-germane chapter on the legal limitations of medical practice, *mal appropos* as it is to the scope of the book, will amuse the reader, especially if he should happen to be a professor in a medical school.

CLINICAL PSYCHIATRY, a text book for students and physicians. Abstracted and adapted from the seventh German edition of Kræpelin's "Lehrbuch der Psychiatrie." By A. Ross Diefendorf, M. D. New edition, revised and augmented. The MacMillan Company, New York.

This is a timely new edition abstract for the American and English reader of Kræpelin's Lehrbuch de Psychiatrie, the only omissions being "The general etiology, diagnosis and treatment in the first volume" of the distinguished author, the revisor deciding upon such points as are of the most importance and adding them to this department.

The book will prove of value to the American physician interested in the study of psychiatry but we regret to see that so many of the author's methods of treatment are omitted, especially without the author's special sanction.

FOLIA THERAPEUTICA.—A copy of the second number of a new journal on therapeutics entitled the "Folia Therapeutica" has come to our notice.

It will be the aim of this journal to devote itself to publications on the progress of modern therapeutics and pharmacology, and to present in a brief and concise manner the methods of treatment and preparations which can be safely recommended for use, and which constitute a real advance in therapeutics; and the evidence given for the reliability of any treatment or drug will consist in the unquestionable authority of the authors by whom, or under whose supervision, the investigations have been made. The names of the editors Baginsky and Snowman guarantee the worthy character of the journal.

We take pleasure in putting the same on our exchange list as requested. It is issued from 83-91, Great Titchfield Street, London, W. This new applicant for professional favor is published by Messrs. John Bale, Sons & Danielsson Ltd., Oxford House, Great Titchfield Street, London, W. The names of Sawyer, Senator, Taylor & MacKenna, Schmieden, Arnold Edwards, Barendt, Gossman and Brieger appear among the contributors to number two of these therapeutic folia of most excellent promise.

A Plea for the Earlier Diagnosis and Treatment of Epilepsy. By M. L. Perry, M. D., Superintendent State Hospital for Epileptics, Parsons, Kas.

Thirteenth Annual Report of the Craig Colony for Epileptics, Sonyea, N. Y., 1906.

Medical Expert Evidence and the Bill Pending before the Legislature of Maine. By Clark Bell, Esq., LL.D., President of the Medico-Legal Society of New York.

Therapeutischer Notizkalender für Praktische Aerzte. Vierteljahrsbeilage zu Deutsche Medizinische Zeitung. XXVI. Jahrgang 1905. 2 Heft. April bis Juni. Verlag von Eugen Grosser in Berlin SW.

A Critical Analysis of the Expert Testimony in the Jack the Stabber Case. By David S. Booth, M. D., St. Louis.

Neurasthenia, Traumatic and Idopathic; its Pathology and Prognosis. By David S. Booth, M. D., St. Louis.

Alcoholism and the Narcotic Drug Habits. By B. B. Ralph, M. D., 529 Highland Ave., Kansas City, Mo.

The Radical Mastoid Operation for Chronic Suppurative Otitis Media. By Hanau W. Loeb, A. M., M. D., St. Louis, Professor of Diseases of the Nose and Throat in St. Louis University.

27th Annual Report of the State Hospital for Insane, S. E. District of Pennsylvania, Norristown, Pa., for the Year Ending September 30th, 1906.

Abnormality in Amniotic Secretion in its Relation to Fetal Malformation. By Joseph Brown Cooke, M. D., Adjunct Professor of Obstetrics in the New York Polyclinic Medical School and Hospital, Surgeon to the New York Maternity Hospital; Visiting Obstretic Surgeon to the Misericordia Hospital; Fellow of the New York Obstetrical Society, etc.

A Case of Landry's Paralysis with Recovery. By Wharton Sinkler, M. D., of Philadelphia.

Protestant Hospital for the Insane, Verdun, Montreal, Que. Annual Report for the Year 1906.

Central Indiana Hospital for Insane. To the Governor. 1906.

A Plea for the Simple Round-Ligament Ventrosuspension. By B. S. Talmey, M. D., New York.

The Food and Drugs Act as it Relates to Drugs. Examined and Explained in Connection with the Rules and Regulations for its Enforcement.

Indiana Medical College, the School of Medicine of Purdue University.

Report of the Department of Health of the Isthmian Canal Commission for the Month of February, 1907. By W. C. Gorgas, Colonel, Medical Corps, U. S. Army Chief Sanitary officer.

The Growth of Neurology. Chairman's Address Before the Section on Nervous and Mental Diseases, at the Fifty-Seventh Annual Session of the American Medical Association, Boston, June 5-8, 1906. By Wharton Sinkler, M. D., Philadelphia.

Monstrosities vs. Maternal Impressions. By George S. Courtright, M. D., Lithopolis, Ohio. Read before the Ohio State Medical Society and Published in the Transactions.

Carcinoma. By J. P. Crawford, M. D., Davenport, Iowa. Oration on Surgery Read Before the Iowa State Medical Society, Des Moines, May 17th, 1906. Opening with the statement that there is no disease afflicting the human family that continues to be of greater concern than carcinoma, and noting the growing distrust in the efficacy of all therapeutics, surgical as well. At present the vision of success is not inspiring. To this vast company of sufferers this beautiful world is likely to continue a veritable charnel-house in the midst of life. The author thus gloomily concludes an able survey of this therapeutically discouraging subject. The author's surgical technique is admirable.

A Review of the Opsonins and Bacterial Vaccines. By E. M. Houghton, Ph.C., M. D., Junior Director, Biological Laboratories, Parke, Davis & Co., and Special Lecturer in Medical Department, University of Michigan. Directions for Determining the Opsonic Index of the Blood. By E. C. L. Miller, M. D., Research Bacteriologist, Department of Experimental Medicine, Parke, Davis & Co., Detroit, Mich. This is a good presentation of an interesting subject which every physician should read. It comes with compliments and approbation of P., D. & Co., which constitute a guarantee of merit.

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THE MEDICAL ERA'S SPECIAL EDITIONS.—The *Medical Era*, of St. Louis, Missouri, will conform to its usual custom and issue its yearly series of special Gastro-Intestinal numbers embracing July and August. The August issue will be given over entirely to the consideration of every phase of Typhoid Fever. The series will contain about 35 or 40 practical papers and will contain a large amount of valuable information.

IN THE TREATMENT of the chronic skin inflammations, following in the wake of attacks of toxic dermatitis, attention to the general condition of the health, avoidance of anything irritating to the skin, a carefully selected diet and proper care of the skin are important features which must not be neglected. In addition, Battle's preparation of *echinacea augustifolia* and *thuja occidentalis*, which goes under the trade name of *Ecthol*, should be used both locally and internally, a drachm should be taken four times a day.—*American Journal of Dermatology*.

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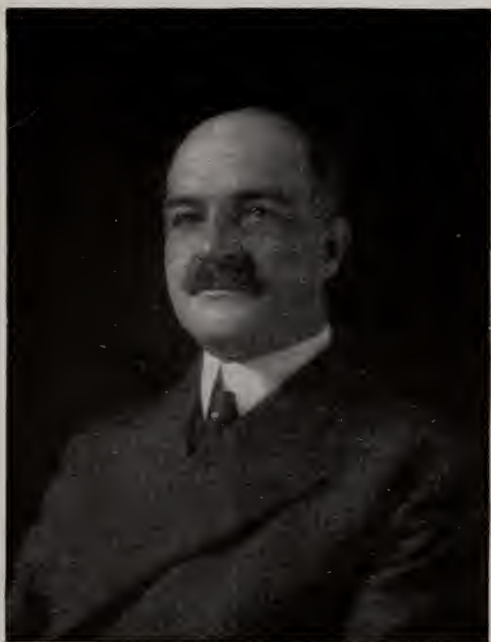
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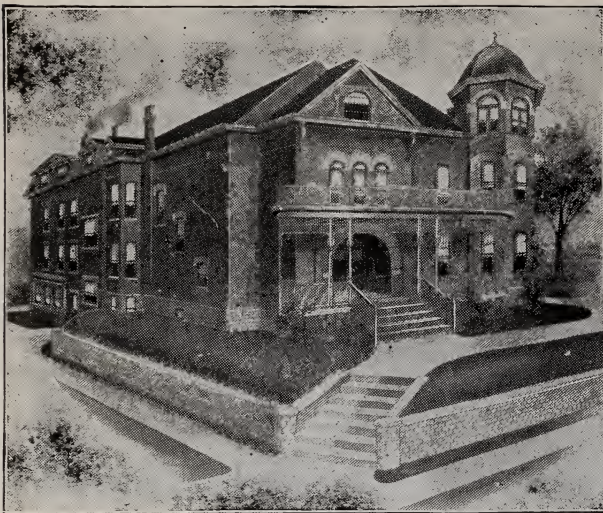
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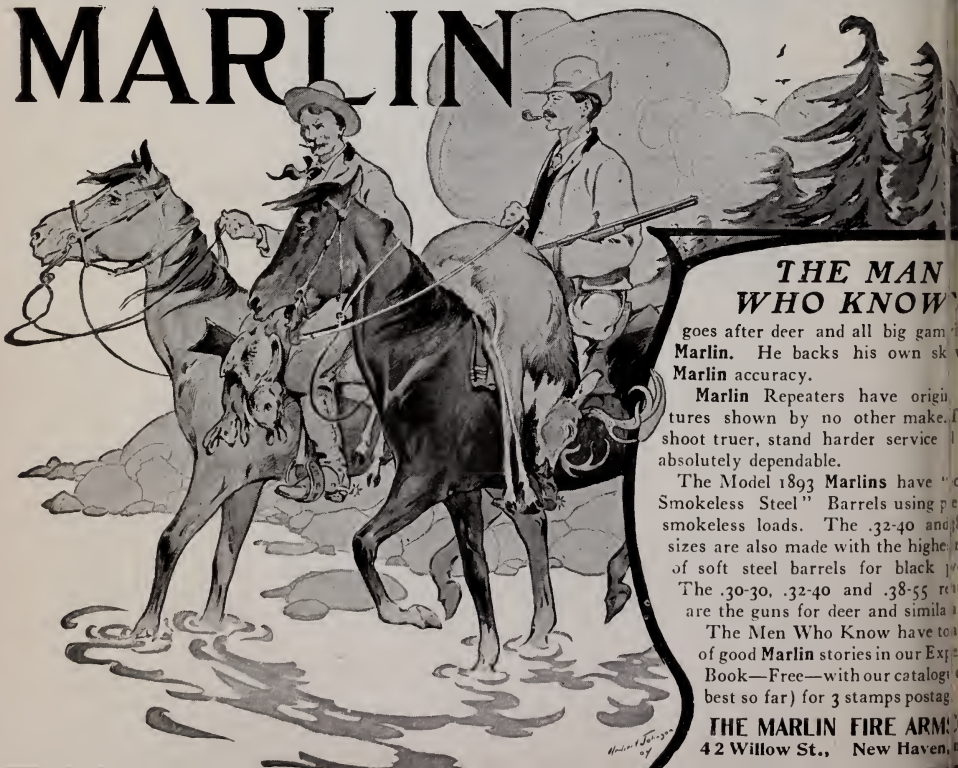
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ALIENIST AND NEUROLOGIST

VOL. XXVIII. ST. LOUIS, NOVEMBER, 1907. No. 4.

ELECTRICAL SLEEP.

By C. H. HUGHES, M. D.

ST. LOUIS.

FROM *Le Monde Medical* we abstract the following for the information of our readers and for further elucidation and comment:

"Dr. Leduc, of Nantes, demonstrated in 1902 the possibility of sending animals to sleep by means of low tension electric currents. At present it looks as if the method would very shortly be applicable to human beings seeing that Dr. Leduc has tried it on himself with complete success. The method is therefore of interest so we give the details on the subject furnished by Dr. P. C. Petit who abstracted the experimental researches carried out by Mdlle Robinovitch.

"The apparatus necessary to send animals to sleep is very simple. All we require is a means of obtaining the continuous current. Transportable batteries will answer the purpose and they should be provided with a voltmeter and milliamperemeter so that we may know the voltage and strength of the current employed. This must admit of ready graduation which can be done by means of a resistance coil.

"The current may be either continuous or galvanic. To bring about sleep it must be interrupted so as to make it discontinuous. Dr. Leduc designed a special interruptor

for this purpose giving about 110 makes and breaks per second. This is hardly enough. The interruptor is provided with an insulating wheel studded with metal studs which come into contact with two small metal brushes. The current passes when the two brushes come into simultaneous contact with the metal studs. One of the brushes is movable and may be fixed so as to come into contact with a metal stud during a fraction only of the time the fixed brush rubs the other stud. The current will thus only pass just so long as the movable brush is in contact.

"Experience shows that it is well to make the movable brush contact one-tenth of that of the fixed brush.

"A simple rule of fractions will make the matter clear.

"We have mentioned that the current is interrupted 110 times per second and each second may be subdivided into 110 parts or 1-110th of a second. The wheel makes a complete revolution in 1-110th of a second but the movable brush being in contact only one-tenth of this period it follows that at each turn of the wheel, that is to say at each 1-110th of a second, the current only passes during one-tenth of this 1-110th of a second.

"In short we obtain a current which varies in intensity passing 110 times a second for one-tenth of this period.

"The motive power of the apparatus must be furnished by accumulators the mains in general being subject to minor irregularities which render sleep unequal and agitated.

"Everything having been made ready the animal is firmly secured. The parts to receive the current are shaved. The negative electrode is placed in contact with both thighs. Then the current is turned on.

"At first the animal displays some uneasiness, it struggles but after a little tremor "the pain dissappears, the animal still tries to raise its head which soon falls back on the table, the eyelids close and it looks as if asleep, it lies quiet, respiration and the heart beat remain regular."

"This result can be obtained with 6 volts and 1 milli-

ampere and sleep has been maintained as long as eight hours and twenty minutes.

“Observations were made of the various functions during the experiment. According to Robinovitch the pupils are contracted and the temperature appeared to be somewhat lowered. Heart and breathing normal, arterial pressure was heightened as long as the sleep lasted.

“The interest of ascertaining the effects on man was obvious and accordingly Dr. Leduc subjected himself to the electrically induced sleep with results worthy of record. We give them in his own words: “The first to be inhibited were the centres of speech followed by complete inhibition of the motor centres. The subject becomes incapable of opposing even very painful stimulation; he is unable to communicate any longer with the persons conducting the the experiment. The limbs, although not in a state of complete resolution, present no rigidity; there may be a little crying out which has no relationship with any painful impression and is apparently due to stimulation of the laryngeal muscles. The pulse remained unchanged in our experiments. Respiration was slightly hampered. When the current reached its maximum intensity I could still hear what was going on around me, as it were in a dream. I was perfectly conscious of my inability to move or to communicate with those near me. The sense of touch remained active. I could feel when I was pinched or pricked but the sensations were, so to speak, numbed. The most disagreeable sensation was the disassociation and gradual disappearance of the senses. This impression was like that of nightmare in which one is threatened by some imminent danger and can neither move nor utter a cry. Nevertheless I regretted all the time that my colleagues did not push the current to the point of inducing complete inhibition. After a preliminary experiment my colleagues, thinking that inhibition was complete, cut off the current before complete abolition of consciousness. The electromotor force was raised to 35 volts with 4 milliamperes intensity in the interrupted current. In the two consecutive sittings I remained twenty minutes under the influence of the

current. The awakening was instantaneous and the immediate feeling was one of comparative well being."

"In this experiment one electrode of cotton wool steeped in salt water and a metal band was fixed to the head and the other was applied over the kidney region.

"The absolute innocuousness of electrically induced sleep is confirmed by all writers on the subject so that one day electrical narcosis may compete with chloroform and other narcotics. Meanwhile Dr. Petit opines that as it is free from risk it might be tried in the treatment of mental diseases and the "sleep cure" would also be indicated in the treatment of agitated lunatics."

The contributions on the subject of electrical sleep by Doctors Leduc and Petit are valuable and interesting and the statement of Leduc as to the absolute innocuousness of electrically induced sleep being confirmed by all other writers on the subject is in accord with the present commentator's clinical observation. We have successfully managed insomnia by constant current labile electrizations of from eight to twelve and more milliamperemetre power since 1872, and almost daily—except during our vacations—without untoward result and with the most satisfactory therapeutic impression, assisted *ad interim* by suitable somnific medication and adequate hepatico-intestinal.

A clean and clear intestinal tract, a right working gastro-duodenal digestion and a general system free from excessively irritating fatigue toxins that irritate the brain, constitute an important concomitant therapy for the prompt, effectual and permanent cure of neurotic insomnia. Many cases are so gravely neurasthenic and psychasthenic that relief should be immediate, and provision should be made in an annex, sleeping contiguous to the physician's room or a sleeping apartment very near by, in order to certainly save some of the insomniacs who too tardily consult the neurologist and alienist.

Cephalic electrizations, as Petit suggests, ought to be tried upon the insane. It ought to be a routine therapeutics in institutions for the insane upon all except the somnolent forms of mental derangement and these ought

to be benefitted by static electrizations and the ozonized room and Finsen ray, where these instrumentalities do not promote or excite *de novo* delusion.

The rotation, in this country, for political reasons, of medical officers of insane hospitals acts against the welfare of the insane by putting over them medical heads who are novices in psychiatry, hence the neglect of proper psychotherapy, and improper neglect is a more active and judicious therapeutic treatment than some of the institutions afford the patients.

This evil and wrong against the rights of the insane to the best and most skillful chance to recover through experience guided, suitable treatment is not so great as formerly and it is to be hoped that it will soon cease to exist.

Insomnia in the insane being their most characteristic symptom and the chief cause, it would be well if constant current daily, afternoon or evening cephalic galvanization should become a routine practice in hospitals. It might be used as an adjunct or substitute for the tranquilizing bath in paroxysms of excitement. At all events it is a valuable addition to hypnotherapy, medical or otherwise, in psychiatry.

As early as the beginning of the eighteenth century John Wesley, of England, and his brother were relieving the pains of lumbago, rheumatism, chorea, sciatica, stomach, bowels and head, and incidental to their cure were promoting sleep by means of static electricity.

The Wesleys were followed about the middle of that century by our own Benjamin Franklin, who was followed by L. Cavallo in 1777, the elder Fothergill in 1790, and later by Addison, Goding, Bird, Sir William Gill and others 1837 to 1853, according to Dr. H. N. Chapman's chronology.* Chapman also makes the statement which we have to a very great degree verified with adjunctive therapeutics since 1870, that by static electricity "insomnia due to worry, anxiety or over strain is * * * relieved in 98

per cent of cases * * * with no depressing or disturbance of stomach.”

The Profession of Wesley's day, however, did not approve his methods or means of treatment. It has lived to learn more and better of therapeutic electrizations.

*Is the Induction machine, commonly called static, of any therapeutic value?—*St. Louis Medical Review*, July, 1907.

SOME PSYCHOLOGICAL STUDIES ON MAN'S MORAL EVOLUTION.—No. III.*

THE STAR OF BETHLEHEM AND THE MANGER IN JUDÆA.

By ALBERT S. ASHMEAD, M. D.,
NEW YORK.

AS an example of the operation of the Law of Demolition, I may refer to race decadence and its danger, from the highest birth rate being in the lowest social class.

Widespread attention has been attracted by the alarmist opinions expressed on certain vital social problems by Sir James Crichton-Browne in his presidential address to the sanitary inspectors' congress. He discussed race suicide not from the point of view of a falling birth rate, but in regard to the close relationship existing between undesirable social conditions and a high birth rate.

He quoted startling statistics which proved that in districts where there was overcrowding, where there was a superabundance of the lowest type of labor, where infant mortality was greatest, where there was the most general pauperism, where signs of bad environment, like phthisis, were most abundant, and where pauper lunatics were most numerous, the wives of reproductive ages had the most children. Where there was more culture and education, as shown by a higher proportion of professional men, where there was more comfort and leisure, as shown by a higher percentage of domestic servants, there the birth rate was lowest. Wives in districts of the least prosperity and

*Concluded from August, 1907.

culture had the largest families and the morally and socially lower classes of the community were reproducing themselves with the greatest rapidity.

We had, he said, to deal with a reduced fertility in the more intellectual, the more prosperous, the more thrifty and cleanly classes of the community which could not be accounted for by a variation in the mean age of possibly productive wives. We were confronted by diminished fertility, lessened exercise of fertility or deliberate restraint of fertility among the élite of our people. Bearing in mind that 25 per cent of the married population produced 50 per cent. of the next generation and that mental and moral traits were not less hereditary than corporeal appearances, it was impossible to exaggerate the importance of the problems that were raised by the figures he had adduced.

If we were recruiting our population from the poor and mentally and physically feebler stocks of the community at a greater rate than from the better and more capable stocks, then the gradual deterioration of the race was inevitable. Weeds would accumulate and good grain grow scarce, and if the relationship between inferior social status and a high birth rate in towns had practically doubled during the last fifty years the outlook was gloomy.

Some hope might be founded on the fact that the operative causes of the low birth rate had not yet affected the rural population, from which we might hope to draw invigorating elements. The relative fertility of women living in the country was from 8 to 11 per cent. greater than of women living in towns, but urbanization was going on at a rate that must rapidly reduce and before long cut off the supplies from this source of sound, progressive human material.

The complex problem is connected with racial, industrial, economical and religious as well as social conditions, but in the main the decline must be ascribed either to physical degeneration affecting the reproductive power and diminishing fecundity or to wilful and systematic prevention of child birth. The deterioration of the moral standard which the practice of race suicide implied was itself an

indication of debility and decay. If race failure was being manifested more rapidly in the superior than in the inferior varieties of the race, if the reduction in size of families had begun at the wrong end of the social scale, then national decadence and disaster must be anticipated.

We must not wrap ourselves up in racial self-conceit, he said. We must not forget Greece and Rome and the Byzantine Empire. The racial struggle for existence is not over and finally decided in our favor. The strategy of the struggle and the weapons employed in it are changing daily, but it is going on, and if the second Hague conference were to succeed to-morrow in abolishing war and securing universal disarmament it would only mask the conflict and perhaps hasten the catastrophe, and a declining birth rate, especially a declining birth rate among the best breeds means a diminishing racial resistance.

The entire press discusses Sir James' warning in a much more sober spirit than it has before devoted to the subject. Its previous references to the problem have been largely confined to remarks in anything but a serious vein in regard to President Roosevelt's agitation of the subject.

I do not exaggerate when I say that Dirt, Disease, Deceit and the consequent Discord are fixed prominences of Nature against which the human race is pitted, and before which never ending contest the vast majority fall, beaten to a premature grave.

The three D's! Nature is content with, indeed insistent upon the three D's, and smiles at the fourth.

The Wise Men of the East were led by the Star of Bethlehem to the manger in Judæa. Is this allegorical, like the Serpent in the Garden of Eden? Is it too, a picture of man's pre-history, before he had gift of speech? All the pictographs and petroglyphs of Patagonian man show that he was speechless when he marked his thoughts upon stones or other objects. His expressions in form long antedated his linguistics and gutterals. What did they mean by this symbol of the Star pointing Man to the innocence of the babe?

Horace's rustic waited for the river to run down. If he could have waited long enough he might have seen its last drop roll by. But human nature is always the same. If one of those who died when the world was young, should return to it now he would not know its cities and their customs; but he would know its children and their ways; its mothers and their hopes; its lovers and their vows; its tears and penalties. He would not know the old philosophies by their new names, written in new alphabets, and spoken in new tongues; or the old sciences, like astronomy, under the modern developments; but he would know the human heart and its ideals as he would know the midnight sky and its changeless constellations.

We are told that our's will one day be a dead planet, moving with other dead planets around a cold and darkened sun. That will not matter, if love is immortal, and love we call God. A wandering angel curious of such things would find amid the ruins of our boasted civilization, here and there an infant's toy, a marriage ring, a sculptured cross. "These are tokens," he would say, "of Eternity, not of Time." The tears we shed in sorrow for our dead, and our broken hearts, our memories of loved ones gone from us forever, lead, like the Star of Bethlehem, to the manger at Galilee. What more than this can heaven teach us?

I admit that consolation is to be found along this path, and hard truth of rationalistic philosophy emits no warmth. "So mote it be," whatever that means. The escape that man reaches from the four D's is in a fifth D—Death.

Mr. Edward Dobson assumes that "the evolutionary doctrine is no longer debatable except in minor phases."

It is an odd thing that the "evolutionary doctrine" (by which is probably meant the hypothesis of genetic evolution by natural selection, which may be called the Darwinian theory) is popularly supposed to be finally accepted by the scientific world. There could be no graver error. Natural selection is at best a working hypothesis with a minimum of scientific evidence, and a maximum of more or less ingenious, but loose and unscientific reasoning.

John Geraid says, speaking of Darwinism, "In spite of its great name its success has throughout been popular rather than scientific, and as time went on it has lost ground among the class most qualified to judge. Evolutionists there are in plenty, but very few genuine Darwinists, and among these can by no means be reckoned all who adopt the title, for not a few of them, like Romanes and Weissman, profess doctrines which cannot be reconciled with those of Darwin himself."

Prof. Huxley, an ardent exponent of Darwinism, could not unreservedly accept the theory, and a score or more of scientific men of the first rank could be named who "reject Darwinism altogether, or admit it only with fatal reservations."

That higher forms of organic life have been evolved from lower is not disputed, but that all organic life has been so developed genetically from substantially the same form of germ plasm is very far from an accepted scientific fact. Apart from biological research, which cannot be conclusive, all we have to guide us are the fragmentary records of paleontology, which, when critically examined, certainly do not help the affirmative very much.

It is not possible without encroaching seriously upon the didactic to show the many obstacles to the acceptance of the theory in question, but generally speaking, the fossil records of organic life are fertile with evidences antagonistic to the hypothesis of genetic evolution, while the evidence required to support it is conspicuous at every turning point, by its absence, and has to be supplied by the ingenious imagination of its advocates. As Mr. Fabre says, (quoted by Geraid); Let us acknowledge that in truth we know nothing about anything as far as ultimate truths are concerned. Scientifically considered Nature is a riddle to which human curiosity can find no answer. Hypothesis follows hypothesis, the ruins of theories are piled one on another; but truth ever escapes us. To learn how to remain in ignorance or innocence of a baby may well be the final lesson of wisdom.

Dr. Ravogli, of Cincinnati, in his "Syphilis in Relation to Crime," says that this disease in acquired and hereditary forms has increased crime, and therefore can be considered as one of the predisposing causes of criminality. He thinks it worthy of consideration, by the deleterious action of the virus on the vascular system and on the nervous centers, which serve to explain the degenerations and degradations of the meninges and nerve cells and fibres. Psychoses of specific character are noted occurring at an early age by Berkeley, Huebner, Gowers, Shulter, Hjelmann and Heiman, the percentage being 45. Clouston suggested (quoted by Ravogli) that "tissues that mature slowly are more liable to be affected by hereditary disease." Growth and energy, with impaired circulation, may do harm, because it cannot be rightly distributed and proportioned. Heredo-syphilitics often show disproportions, or immature nervous system, with deep moral alterations, so-called degeneracies. Lombroso found the percentage of such to be 40. However, Ravogli finds normal types in many, where circumstances have impelled to crime, rather than congenital impulsions.

Regarding the effects of syphilis on the brain, Ravogli mentions the syphilis epidemic of the 15th century in Europe and its suicides due to neuroses and psychoses and resulting cerebral affections which were transmitted to children and grandchildren.

At the beginning of the spreading of syphilis in Europe, when the best people were affected with it, the best brains, crime after crime was committed through Europe. Criminality was epidemic. Nobles and rulers and ecclesiastics had crazy spells of religious asceticism. Unwarranted murders were done. The massacre of the Huguenots in 1572, the diabolical scheming on all sides, the butcheries perpetrated by the Inquisition, the wars and insurrections of the times of Popes Clement VII, Alexander VI and Leo X are cited by Ravogli as instances of first generations of heredo-syphilitis. Holy massacres, burnings at the stake, tortures, etc., were followed by famines, misery, pestilences, and ravaging of populations, an outbreak of evil, so to speak. Ravogli

refers also to the widespread occurrence to-day of syphilis in Russia and the reign of massacre and terror resulting therefrom, like the killing of Jews at Kishineff, etc. Where syphilis reigns there degeneracy is widespread, he says, and he considers the relation between syphilis and crime as in direct relation.

The existence of moral insanity he thinks is often the result of syphilitic alteration of the blood vessels, and is due, according to some writers he quotes, to meningitis, foci of softening, apoplexy or advanced condition of arteriosclerosis.

The syphilitic degenerates, morally insane, are most dangerous criminals. Guiteau is cited as saying: "For fifteen days I was inspired; I could not eat nor sleep until I executed the deed, after which I slept soundly."

Lombroso divides criminality into atavic and evolutive criminality; the first using violent means, the other keen fraud and deception. Ravogli believes that the syphilitic and heredo-syphilitic are pre-disposed to the first.

Ravogli does not excuse the criminal by his syphilitic taint, nor does he defend him for limitation of free will. He mentions the strange relation existing between syphilis, crime and prostitution. Chicago, which has more syphilis than New York has also more crime. Syphilis is connected too, with pauperism, etc. But then how does Dr. Ravogli explain the absence of all these results in excess from the population of Japan, where the race has been saturated with syphilitic poison 1300 years, while Europe has only known it since the 15th century? The violent love of murder and war, in Japan, is not due to syphilis at all, but to the Brahmanical war-god worship of Krishna. The love of bloodshed antedated their syphilitic infection. And Japanese degeneracy was not shown in the Russo-Jap war.

Dr. Ravogli in closing his paper says, "There is no doubt that crime has been referred to the devil. We see the same thing embodied in the old mythology of the story of Isis and Osiris." He believes that syphilis, while not being the determining cause of crime, is one of the pre-disposing factors in the instigation of crime.

That is to say that it is the cause of all these evils cited and that is why criminals have so little free will. But that assumes that there is such a thing as free will to begin with. I doubt that. How about the degeneracy of Greece and Rome, and that of England, which is now going on?

It is preposterous for me to suggest that I can confidently disagree with Dr. Ravogli. But I am able to say that I would have to be convinced away from my present impressions which cannot instantly accept his conclusions as I understand his statement of them; the cause of practically *all* evil.

But granting this is his declaration, I am not moved from my position of attack upon "the sorry scheme of things entire," and its Great Author; assuming that an *Intelligence* has ordained all that is—a personal Intelligence. If Dr. Ravogli directly or indirectly accuses man or mankind, I must instantly ask: Why did Omnipotent Goodness create evil? Why does Omnipotent Goodness permit and continue evil?

If syphilis is a feature of evolution, or an incident of operation of an unguided procreative faculty, obeying the mandate "increase and multiply" then is my position strengthened. There is no Free Will. I recall that a long time ago attention was called to venereal disease in the Pigeon family, whose members are quite faithful to their spouses. And Ancient Man in the Aymaran and Incan periods of "civilization" became infected with his first experience with the disease by cohabitation, on a mountain height, while keeping naturally warm near the female llama, whose disease it was. In China, since 1124 B. C. syphilis has raged without degeneracy resulting.

If Dr. Ravogli in any respect finds man derelict, except as a waif upon the ocean of Eternity, battered upon the shores of Time, I must dissent. But perhaps I do not read the article and follow Dr. Ravogli step by step from start to finish. I am venturesome enough then to say that the paper should be read between the lines, for there may

be a leaning towards the dogmatic theology, upon "The Fall of Man."

Irregularity shows lack of co-ordination towards an end on the part of an individual; discord follows. Nature is content with the mediocre, and the higher the excellence, the nearer the vanishing point.

Dr. Ravogli, while he cites in his article, as I said, the fact of the widespread occurrence of syphilis in the 15th century as a reason for the peculiar aberration of moral sense, and psychoses among the learned, as cause of the subliminal outbreak of such evils as the massacre of Bartholomew, and of Huguenots, the Spanish Inquisition, etc., and the present epidemic of syphilis throughout Russia to explain the massacre of Jews at Kishineff and elsewhere, a general letting loose of hell, so to speak, in that empire, neglects to mention that a worse outbreak of syphilis in Japan did not prevent in the Empire of the Rising Sun, acceptance of the most peaceful natural religion which the world of man has ever known; that the outbreak of blood-thirst and criminality in the Japanese was due to ante-Buddhist imbibition of the spirit of Krishna, or god of war devilment, which came to them through Brahminism, and which remained with them even after Buddhist, or worship of earth nature had become engrafted on their pagan astronomical Shinto faith. An Age of Innocence might well be typified allegorically by wise men, or wisdom of the East, being led by the worship of astronomical bodies, to the cradle of a Christ in the manger of Judæa, just as syphilis or reverence for generation or procreative power was expressed by a snake or serpent in a Garden of Happiness. Before language was known, before the human third cerebral convolution or speech center had evolved, mankind expressed, doubtless, its mental ideas or operations by pictographs on stones, or by manual signs not marked on stones, when it could only utter gutturals, before such sounds meant words, before "the beginning was the Word, and the Word was God."

In Calchaquin symbology, syphilis, the disease of procreative power, was painted as a serpent eating the male

organ of generation. The Serpent and the Tree was a well-known distinct worship of procreative power and fertility, before the worship of the sun, moon and stars (planetary worship) had come into being. How absurd then, to attempt to attribute to syphilis the origin of evil. In fact, at an early stage of human brain evolution the disease was recognized as the Power which had all to do with generation. Man was then just beginning to know that he had a soul. Among nobles and persons of authority those who had the most power over females, the disease was certainly rampant. Thus man bowed down to it when expressed so that it could be read. It meant power and the power was worshipped even when seen on stones. Sexual domain was the first kingdom on earth. Men cut their foreskins off and sent them to the strongest, to show him that they were his subjects. He had dominion over their wives. This was the first government of man.

The outbreak of syphilis in Russia, of course, has a cause, and the author of the paper "Syphilis in Relation to Crime," should have paused for answer to a question that should be auto-propounded. The question is this: Has the present outbreak of that disease in Russia any connection with a mind and moral degeneracy due to the policy of the government in encouraging the drinking of spirits for the purpose of increasing its revenues by a liquor tax? How long has that been the policy of the ruling class? Is it more particularly the policy now than at any previous time?

I believe that autocracy to be capable of any systematic oppression of the people, if thereby they can retain their supremacy and their estates; their large holdings of land granted centuries ago.

A degraded peasantry becomes a chattelaine of the land; working in the fields, the forests, the mines and at the fisheries for mere existence, the money return for the produce of their delvings being squandered in the capitals of Europe. An army can easily be enrolled, thus, from the peasantry; and brought under discipline, freed from drink, given secure lodging, sufficient food, warm shelter—little

of which they knew at home—they became quite faithful defenders of that system which degraded them before they wore the uniform and possessed the authority conferred upon them by the government. Drink, dirt, disease are the great trinity of demolition—and so they ever will be. Purity in nature is as purity in politics, described by the late Senator Ingalls, as “an iridescent dream.” Even in this enlightened land we see hatred of Jews openly expressed among our artisans and laboring classes. In France likewise. I need not extend this. My assignment of the particularly stated intent of the writer of the Story of Eden grows upon one, especially when connected with examinations, and the results thereof, of archæologic remains of symbols, in which I am engaged. Much of interest for the world at large will be presented if the time and probable place of the origin of the allegory can reasonably be determined.

The allegory is very chaste and pathetic; the pottery symbols are quite suggestive. Do we behold a cognate, simply; or was there a similarity of perception in places far removed from each other? If the latter, when relatively as to time? If the perception originated in the East, or in the West, then, in the absence of long distance navigation, was there an island or continental intermediary—in which connection the story of Atlantis becomes *in presenti* worthy of consideration. I have considerable confidence in the tradition handed down by the Egyptian priests, which Donnelly so enthusiastically and laboriously supports. Navigation was by the stars, long before it was by the compass of Phœnicians.

To return to Dr. Ravogli's paper: About thirteen years ago, in conversation upon the Middle Ages, Mr. Wilson, now dead, at that time book reviewer for the New York *World*, told me that syphilis was introduced into Europe by the Crusaders upon their return from the East. I did not give the matter any further thought, deeming it unlikely, as I now deem it. It is recalled to memory by the allusion to St. Bartholomew. Hatreds between religions needed no especial provocative to bloody conflict in those

days. It was an age of blood. The Hebrew—Christian God (“vengeance is mine, and I will repay,” saith the Lord) was carried belligerently against all comers; against the Mohammedan rival prophet or intermediary, who was not Christ. The Christian form of faith was young and self-assertive; was ebullient. Desertion from the elect by Luther, aroused, as we all know, the bitterest ranklings. This is so established that it surely cannot have escaped the attention of Dr. Ravogli. Therefore, why not approach his paper cautiously? Possibly he has reserves of statistics, or other data, upon which he takes his stand.

But if he be measureably correct in his conclusions, does he feel able to say that he notes anything further than a coincidence? If one can definitely present cause and result, as that 2 plus 2 make 4, then one has knowledge. Unless he can go further than I understand that he has gone, he has simply coincidence and not cognition.

The history of the world could easily have been written in the blood shed in war. It seems like a waste of time to assign any particular reason for any particular war, or local disturbance. In great mind movements the weak-minded congenitally, the weak-minded degenerately, are always moved to great excesses by the mentality of leaders, of exhorters. We have seen here in this city within a few years, men and women ordinarily sane, strip their jewelry from their persons, open their pocketbooks, and give their goods to the payment of a church debt, under the influence of the speaker hired for the purpose.

The ecstasy and the murderous fury of religious devotees need no recapitulation. But Dr. Ravogli's paper he has submitted to the world; he is willing to risk opposition of opinion; he may be better fortified than he has disclosed. As to Russia, he advances hastily, it would seem.

The Japanese citation I have made, seems to be quite in point. Yet Dr. Ravogli might argue in a direction thus: The Japanese are successful because of the qualities of

their Negro and Malay ancestry yet predominant; and, in spite of their syphilized state, they have retained a calm which the New World has not inherited.

The Japanese appear to me to have relation to a past so remote that a deep and wide gulf separates them from us and from themselves of to-day; some period in the past which would be as the disclosing of a new world to us could we know and read it in their traditions and *Sagas* and literature. I seem to look into a strange and gruesome scope so unlike anything the world of to-day is familiar with that the beings of the *then* seem to have inhabited a fairy land, a land of story of goblins, a land directly as to its habitants and their forms of thought, directly the reverse of us. A land so far in the past that it never can be pictured; it has gone forever, and in those people we see scarcely a remnant suggestion. At times when I contemplate them I seem to be gazing upon that past, a void, a darkness illimitable from which they emerge. Strange! Strange! And I knocking them into kindling wood.

From chaos of man's intellectual beginning, has come Creation, on several days of his moral evolution: worship of generation or power or knowledge of sex, and its relation to the family and tribe. "Male and female created he them;" worship of the planets, the sun, moon, and certain stars, especially those which were useful in guiding him in his journey or in navigation. That was long before the compass was known to the Phoenicians, long before the earliest Chaldean civilization and its origin of circumcision as acknowledgment of subjection to a ruler, which antedated the Chinese and Aryan. Then came worship of Nature's powers, of animals representing mental traits essential to man's physical existence, especially the animal attributes which would protect him against his enemies of the particular time, such as cunning, etc., or the worship of plants representative of fertility of soil, family or flock. One worship succeeds another as our old world speeds on and ever on, and each subserves its purely material purpose in man's moral evolution.

One who is about worn out with the battering waves of the Ocean of Life, who has his life's lines written on his soul in letters of black crayon, might say:

The present is shut out from me. I live in the memory of the years gone by,—all, all an illusion in youth; a delusion for middle age. Every joy is offset by a grief, and *I hate God*. I remember all the lives connected with me, and their dreams, and their and my unsuspectingness that the quicksands of God's treacherous law of things were under the feet of all. And all are in the grave. The church may inscribe I. H. S. upon its heart. I have put upon my heart I. H. G.—see the rendering above. By this I will stand to the day of my death. It is not the future that I dwell upon—I care nothing for it. The future is all provided for by the same inexplicable law that has produced the present. I dwell upon the injustices of every day, to be observed by all who have passed the exhilaration of youth—a mild insanity, an unguided FORCE; observed by all who have not the calm and indifference that religion gives. I admit the practical value of religion to the individual; I insist upon the practical value of the Church to the community. I beg that I may not be misunderstood. I have heretofore, and many times expressed myself fully upon the character of Nature and Nature's God (if God there be). I will endeavor to say no more.

Nature and Nature's Creator are despicable and murderous beyond human speech to express, and man must be sorrowfully patient.

Even if I read that excerpt from the Chinese literature of Yen Tzsee so full of faith, that holy man, who longs for the boatman to carry him across the river of Death, with silvery voice and in falling cadence each time at the words "over the river," which makes the story of the pilgrim's progress quite effective, I am not satisfied. For Faith is not for me, nor I for it. That which is always present with me is the difference between the promise and the real. We are all misled. You have probably returned from a sorrowful mission, perhaps a dear one lies dying, whom you have visited for a last time. In such matters

words are worthless, so I speak not when I meet you. It is the state of mind that ignores all words. For one it is faith; for another it is resignation. Each produces a calm, perhaps a simulation of indifference. Faith has voice. Resignation is mute. Faith drinks of the "Blood of the Lamb" at the altar. Resignation sometimes "Looks upon the wine when it is red." The former is higher than the latter, but the imagery of each is low. Neither Faith nor Resignation changes one whit the ordained law of distress, modifies not one whit the sentence of decay. The Wisdom that has built the heavens and moulded the earth has made life more to be dreaded than death.

A MISTAKEN DIAGNOSIS OF DEMENTIA SENILIS.

A Medico-Legal Record of the Last Will and Testament of Ben. H. Johnson, deceased; Cause of Clara M. Laswell vs. John Hungate, Executor, in the Hancock Illinois Circuit Court.

Reported With Comments by C. H. Hughes, M. D.

THE HYPOTHETICAL CASE.

The following hypothetical case embraces all the essential facts and conjectures as to the mental state of Ben H. Johnson, deceased. The description in this case was amended and corrected by the attorneys of both sides aided by the court until the biography was acceptable to all parties concerned in the suit and submitted to each and all of the opinion witnesses.

ASSUMING the following to be true: That Benjamin F. Johnson was born about 1825; that his parents were healthy people and of sound mind and memory; that when he grew to manhood he was about five feet and six or eight inches in height, rather spare built, weighed about one hundred and forty or fifty pounds, and had brown hair and gray eyes, and was of a swarthy complexion; that he was in his early manhood a blacksmith; that about 1849 or 1850 he went to California and there made some \$6,000.00 or \$7,000.00 principally by buying at Sacramento, San Francisco and elsewhere, sheep and other animals and taking them up into the mountains to mining camps and selling them; that in a few years he returned to Illinois; that about 1862 or 1863 he purchased a farm in the vicinity of what is now known as Colusa, in Hancock County, Illinois, and moved on to the same about 1863 or 1864;

that thereafter he continued to reside upon this farm until about 1885 or 1886, except that during this time he made a visit to California and was gone about one year, and at another time removed for a short time to the City of La Harpe; that about 1886, he removed from this farm to the City of La Harpe; where he continued to live until his death; that he was married three times; that his first wife died; that for his second wife he married a widow woman by the name of Rapallee, about 1859, and lived with her as his wife until about 1873, when this wife was divorced from him; that he married for his third wife, Phoebe A. Green; that he was a good business man, above the average man in that respect; that he could and did, up to within about one or two years of his death, make his own contracts, attend to all of his business affairs in person, bought lands from time to time in large quantities, loaned money, collected rents and otherwise carried on in person extensive business interests, wrote deeds, mortgages, leases, notes, checks and numerous other papers and contracts in his own hand, and that these show good penmanship and good business ideas and methods; that he accumulated money, lands and other property and left about twenty-three hundred acres of land in Hancock County, Illinois, when he died, a considerable amount of which was acquired after alleged will was made, besides town property in La Harpe and personal property; that he was a well read man; was well posted in current events and could and did talk about them at most times, until within a year or two of his death, coherently with his friends; that he could and did, on numerous occasions, discuss politics, history, religion and many other subjects well; that he could and did play chess frequently; that he was positive in his opinions; of a nervous temperament, was quick spoken and quick in forming judgment, and was economical in his habits; that he always kept whiskey on his premises and drank of the same frequently, but moderately and was never intoxicated; that he was a profane man and used oaths frequently and used the words "by hell" in common conversation; that about 1860 there was born to him and his second wife, a daughter,

who was named Clara M., who was put in school and educated by her father and with whom he kept up a correspondence by letter while in school and after her marriage; that in a letter to this daughter dated March 21, 1873, he wrote "Received a letter from Hot Springs, Arkansas, and they said it would not do for me to go there as they (the springs) are injurious to heart disease; that in another letter to his daughter dated January 8, 1897, he said "I have to be careful of that place in my side where the pleurisy came near killing me in 1845. It has bothered me more or less ever since. It will stop I presume before many years, but whether I will get a sound organization or not in the next life, if there is one, I will not find out until I arrive;" that about 1864, while being assisted by a neighbor in running an underground ditch on his farm, a controversy arose as to the proper manner of running the ditch and after it was run his way he found, after the machine had gone some distance that no cross ditch (as he supposed) had been made and became angry and greatly excited and commenced to swing his hat and jump up and down and swear and talk rapidly and excitedly and, among other things, said "God Almighty, God our Heavenly Father, Oh Jehovah! what a damned fool I was, for not taking your advice;" that on another occasion prior to 1870, while he was having some hedge plants set out by some boys a dog dug some of them up, whereupon he became greatly excited and threw his hat upon the ground, cursed and swore and stamped upon his hat and said it's the dogs nature to do it; that while living on this farm on or about November 18, 1870, while bringing a load of about 1,000 feet of wet lumber on a wagon from Dallas City to his home, the wagon was overturned and the lumber fell upon his limbs and the lower part of his body, pinning him down and holding him fast for one hour or more until he, by his cries for help, attracted the attention of a neighbor one-half mile away; that the lumber falling upon him crushed one of his hips; that from the effect of such injury he was confined to his bed for about four months; that during said time he underwent, on account of such injuries, great pain

and suffering; that after leaving his bed he was unable to walk except with the use of two crutches for about one year; that thereafter he was unable to walk except with the aid of one crutch and a cane for about one year; that from that time as long as he lived he was lame and unable to walk except with the use of a cane; that he said on several occasions after being injured by the lumber falling on him that he suffered intense pain at times in his injured hip and limb; that while he was in bed with this injury he had no use of the injured limb; and it had to be moved around by attendants; that the other limb was numb and had to be rubbed; that he said electric batteries were applied to his injured hip and limb; that after that, though he was able to walk on crutches for a time, the foot of his injured limb hung so that his toes would drag; that about 1872 or 1873, he said on one occasion when speaking of this injury, that he didn't think he would ever recover again from that injury, that he didn't rest well of a night on account of the pain he had in his hip, and that he had a pain at the base of the brain, and that he would never be Mr. Johnson again; that he visited Horn's drug store at Dallas City frequently between 1874 or 1875 and the time he, the said Johnson moved to La Harpe in 1886, and that he spoke of his condition to John Horn, the druggist, on most of these visits to the drug store; that he said during one of these visits that his nervous system was shocked, that he wasn't gaining any strength, that he didn't get any rest, and wanted to know if there was anything the said Horn could do for him; that he said to the said Horn he wanted something to bathe his neck, such as he, the said Horn, had recommended to him before, and that he had a pain in his hip and back of his head and neck, and that he couldn't sleep well, that he got liniment from the said Horn, that he asked the said Horn for it and the said Horn put it up for him; that he always wore in cold weather a shawl instead of an overcoat; that he gave as the reason for wearing a shawl that he couldn't handle himself since he had that injury, that he could throw on a shawl, that it pained him under his shoulder-blade and back of his

neck in giving the twist to put on an overcoat; that after said injury he was more passionate and more easily fretted and worried, got mad quicker and was more easily excited and that this increased as he grew older; that at the time of receiving this injury he was living with his second wife; that she was a widow at the time he married her about ten years before, and had by a former husband three children, two boys and a daughter; that after their marriage he accused one of these boys with having forged his name to notes and became very angry at him; that about 1873, this wife procured a divorce from him, and that their property interests were determined by arbitration, whereupon she got about \$5,000.00 or \$6,000.00 of his estate; that he entertained a bitter hatred for her; that he often spoke of this wife and her sons as the Rapallees, and from the time of this divorce he would frequently talk about them, and when doing so frequently became angry, excited and agitated and often gesticulated in a forceful and violent manner, and would frequently stamp his cane up and down, and whirl it round and over his head and cursed and swore and called her a God damned bitch, and said that he had lived in hell for fourteen years and often in the same connection swore that he would never leave his property to the God damned Rapallees; that after their separation he spoke of this wife repeatedly in an angry and excited manner, abusing and cursing her; that on some of these occasions he would have a staring wild look; that this language and conduct was usually commenced by him suddenly and without anything occurring or being said to bring the subject up; that when his daughter, Clara, was about twelve or thirteen years of age she attended a church service at a church within about one-half mile of her father's home, which had been erected on the corner of his farm, and when the minister conducting the services gave an invitation to persons to come forward to the altar she, with about twenty other persons, went forward, and while properly conducting herself at the altar her father came down the aisle of the church and in the presence of the congregation, took his daughter by the arm and took her

out of the church without saying a word, and said to the minister the next day when speaking about the matter, "I suppose you thought I acted very rudely last night;" that he did not want his daughter to do that, that he thought she was too young and did not think she understood what she was doing, and that he did not want her to be a backslider; that on one occasion when his daughter Clara, was about fifteen years of age she and a step-daughter of the said Johnson, a Miss Green, a daughter of his then wife by a former husband, who was about fourteen years of age, got into some altercation, when Clara slapped the face of Miss Green a little; that thereupon said Johnson got a buggy whip and undertook to whip his daughter, Clara, with the same and chased her all around over the house and up stairs and down stairs and when she got into a room and fastened the door he burst the door down in order to get into the room where she was and struck her three or four blows with the buggy whip and continued his efforts to use the whip upon her until his wife, the mother of the said Miss Green, interposed and induced him to desist; that about 1874 or 1875 when it was suggested to Johnson that it would be the proper thing for him to endow some institution of learning after he had made provision for his family that his money might live after him he said in substance he was not in favor of co-education and that a good many young men did not appreciate a free education and some of the institutions of learning and that he had no patience with a man that did not try to do anything for himself; that about 1880 or 1882, after a congregation had assembled one evening for religious worship in said church, situated on the corner of Johnson's farm, and after some of the people had tied their teams to Johnson's hedge fence near the church, and while the services were in progress he walked into the church and standing in the aisle stated to the minister he would like to speak a word and the opportunity being given him he said to the congregation in a loud voice, "By Jesus Christ if you don't take your horses from my fence I will cut every damned one of them loose;" that some time between

1870 and 1886, his step-daughter and her husband with whom he was on friendly terms, were at his home.

At the same time there was visiting with the family his wife's brother and his wife's nephew; that one evening in January or February his step-daughter's husband and his wife's brother went to Colusa station, about one-half mile away, and his step-daughter spoke of herself and the nephew going to a neighbor's to have some music, about one-half mile distant; that it was a cloudy evening, and dark, threatening rain, but not raining or storming; that Johnson then grew angry and said to his step-daughter, "Anybody would be a God damned fool to go out a night like this," whereupon she said, "you can express your words in a different way;" that whereupon he called her a God damned fool two or three times and spoke of her husband and uncle who had gone to Colusa and said in substance that they were God damned fools for going to Colusa such a bad night, thereupon the step-daughter said he had said enough, and then Johnson said to her, "There is the door and you can get out of here;" that the step-daughter then went across the road and stayed all night, she and her husband, with a neighbor; that in all of his correspondence with his daughter said Johnson addressed her as "My dear child" or "My Child;" that all of his letters to her were kind in tone and composition, and that in no letter did he criticise her or find fault with her; that in a letter to his daughter dated February 19, 1882, before her marriage, he wrote among other things, "My lameness troubles me a good deal and my right shoulder that I had crushed years ago by being thrown from a horse is troubling me a good deal this winter. I guess all the infirmities a person ever had in this life visit one in a body when he gets old."

In the spring of the year 1882, while his daughter was in school he spoke kindly of her and said he was going to make her a present of a gold watch and other jewelry, for which he said he had paid \$400.00, and said he was going the next day to take the train and take the jewelry to her, stating at the time she was away at school;

that on the day following he appeared at the railroad station and stated that he was going to take the train and take the jewelry to his daughter; that he exhibited a box and said it was in there; that while waiting for the train he received his mail and opened a letter, that before reading the letter he was calm and normal; that upon reading it he became very angry and called the attention of a by-stander, a Mr. Bailey, an acquaintance, to the letter and pointed to a part of the letter and said see that; that the portion of the letter pointed to read, "dear Mamma you see I spell Mamma with a capital 'M' and papa with a small 'p,'" and where she referred to Papa it was in very small letters, he pointed to another part of the letter and said "See that," which part of the letter to which he pointed to read "I am working papa for this jewelry;" that he then began striking the letter with his cane and said "It is the Rap-palees that put her up to it;" said he knew it was his daughter who had written the letter; that it was her handwriting, that before reading the letter he was calm and collected and in his normal condition, but that after reading the letter became greatly excited and agitated, struck the letter with his cane furiously, sprang up and down, pounded with his cane, that he cursed and swore in a high key and refused to be quieted; that he so continued for about one-half hour, at the end of which time he was weak and considerably exhausted and was assisted into a wagon and taken home; that during this time and while being taken home he stated he was going to write a will at once and cut his daughter off without any of his property; that on arriving home he requested the party who had assisted him to and into the wagon and taken him home to come into the house and witness his will, saying that he was going to write a will at once and cut his daughter out; that on March 8, 1882, he wrote a friendly letter to one Bishop, giving his consent for him to marry his daughter Clara, and expressed therein a wish for their happiness and that they may never have cause for regret; that on March 20, 1882, he wrote a friendly letter to his daughter, Clara, addressing her as "My

Child;" and telling her therein that he had met Mr. Bishop; that he acted straightforward and manly and furnished proper testimonials of his standing, and says to her, among other things, "I wrote to him that whenever you and him wish to unite your destinies you had my consent and saying in this letter further "I will furnish you a bed and some bedding;" that he purchased her wedding clothes; that on August 20, 1882, he again wrote his daughter a letter in which he addressed her "My dear Child" and said among other things, "I have had some changes in my past life that give it variety. At present it is on the humdrum order. Had a lively change a few mornings ago in a bad fall that has crippled my right shoulder badly that, with my lame left hip, takes me diagonally;" that in another letter to his daughter dated October 8, 1882, he said "About three weeks ago I had one of the bad spells I am liable to have and went flat and I don't rally as I would like. A number of years ago two surgeons pronounced sentence on me that I was liable to drop dead at any instant and unless I took extra care of myself I was sure to;" that in a letter to his daughter dated January 4, 1886, he said "I am getting somewhat discouraged with myself. I am so completely worthless and worn out. Probably I have had my share, if not of toil and exposure and now it seems as every crush and strain I have had in the past comes back to annoy me. When I sit down it seems as though I need a charge of dynamite under the chair to raise me;" that in another letter to his daughter dated March 21, 1886, he said "Now that I am crippled and have neither nerve or hope it annoys me;" that in a letter to his daughter dated June or July 27, 1886, he says "I have not passed a day or night since I got crushed without suffering pain in my hip and leg, sometimes very severe;" that in another letter to his daughter dated November 18, 1886, he said "This is the anniversary of my crush on November 18, 1870. Since that night I have not passed a day or night without suffering pain in that hip and crushed limb, sometimes the pains seem too hard to bear;" that between September, 1888

and 1890 or 1891, he got Judge George Edmunds, a lawyer of Carthage, to write a will for him and told him he wanted to give his daughter for life the Southeast quarter of Section 26, in Township 7 North, Range 7 West, Hancock County, Illinois, and the balance of his property, or the big end of it, he wanted to go to the public schools of the city of La Harpe; that thereupon said Edmunds protested and told him he ought to give his daughter more; that he refused to do so and gave as his reason that his daughter was married to a man by the name of Bishop; that they had one son who was four or five years old; that the boy was sickly and would probably not live to be a man, and that his daughter would likely not have any more children, and if he gave his daughter anything more than what would keep her during life that it would then go to the Rappalees upon her death and that he objected to the Rappalees getting any of his property; that on November 16, 1890, he wrote a letter to his daughter addressing her as "My Child," wherein he acknowledges the receipt of a photograph of Roy and says, "Accept thanks. Roy looks quite healthy. Am glad to see the improvement."

In 1888 or 1889 he had a difficulty on the streets of La Harpe, with a minister, in which the minister called him a reprobate and shook his fist under his nose; that the same day or the next day said Johnson went into a store in La Harpe and conversed with one Huston about the difficulty he had had with the minister and said he called me a damned old reprobate, reprobate, reprobate, what is a reprobate? and pounded with his cane and said "I wish I had killed him. I would have if I could;" that he was at the time very white and his eyes had a stary look and that said Johnson returned some four or five times to this store within the next ten days thereafter and on each occasion used the same language in substance and looked and acted about the same on each occasion; that in a letter to his daughter dated March 25, 1890, he said, "Had I not thought somewhat of the future I should now be in a bad fix, old and crippled, not a pleasant situation by any means, and without any means. horrible;" that in a

letter to his daughter dated May 25, 1890, he wrote "I read very little on account of my weak eyes. They are a great annoyance to me, but I bear it with patience. Perhaps I will have a new set in the next world, if there is one;" that in a letter to his daughter dated August 15, 1890, he said "When I look back to the past and think of the labor and exposure that I have stood up to it would make me conclude that in the language of the song, I am a used up man, but I don't indulge in labor much. I think I have done my share in the past;" that on September 2, 1890, he wrote his daughter, addressing her as "My Child;" that he had sent her by express that evening one ladies gold watch, chain and watch box; that in a letter of December 7, 1890, addressed to his daughter he refers to his injury received from the lumber falling on him and says "I lay crushed in the sitting room on the farm. I could not sneeze, cough or draw a full breath without putting me in torture and when I would go into a drowse the nerves would jerk and put me in excruciating pain;" that about 1890 he became very angry and excited because an outbuilding had been moved near his lot line and in a loud voice; used in the presence of his wife and two other women, and two or three men, obscene and indecent language and oaths; that in October, 1891, he purchased meat at a meat shop in La Harpe, and not paying for it at the time, went back in two or three days and paid for the meat, and then in about two days went back into the shop twice on the same day and on each occasion offered again to pay for this meat, that in a letter to his daughter dated July 26, 1891 he said "I have been in the habit of using a great many lemons and a large amount of sour sauce at my meals during the past year. I have had a hurting at the pit of my stomach. It has a very depressing effect on my mind. I got an idea that using so much acid drinks and fruits had injured the coating of my stomach;" that in the year 1892 or 1893 the said Johnson remained all night with B. F. Miller in this county, at which time he discussed the Rappalees; and became very much excited, and said that the Rappalee boys were God

damned dirty curs, but that they came honestly by it from their mother, and at the time, seemed beside himself, looked wild and angry, stamped his cane around a good deal and seemed pretty vicious; that in a letter to his daughter dated August 16, 1890, he wrote "I am not well. Came near having a sunstroke the day I was working to get the brick laid and don't rally worth a cent; that about September, 1894, he had a conversation on a street in the city of La Harpe, with Dr. Barr, who formerly resided with his father near the home of said Johnson when he lived on his farm near Colusa; that the father of said Barr had died about the year 1875, while living a near neighbor to said Johnson, that in this conversation with the said Dr. Barr, the said Johnson asked him about his father's health and was told by the doctor that his father was dead and when he died; that thereafter in the same conversation, lasting only about ten minutes, Johnson repeated the same question twice about the doctor's father and was each time told of his death, that he also told Barr that he thought he would give the Catholic church a part of his property and wanted to fix the rest so that Clara and her son would have the benefit of it; that in the spring of the year 1894, he permitted his said daughter to move with her husband, Mr. Bishop, on his farm near Colusa, Illinois, and live upon the same without charging them rent except requiring them to pay the taxes and keep up repairs; that he permitted his daughter to so continue to live upon and occupy said farm during the years 1894 and 1895; that during those years he frequently went to said farm and to the home of his said daughter, conversed with her, ate with her and sometimes stayed all night with her; that their relations during all this time were friendly; that when he was so in the home of his said daughter in 1894 and 1895, he had a grandson there, Roy Bishop, the only son of his said daughter and who was at that time between ten and eleven years of age; that the said Johnson wrote with his own handwriting in evidence bearing date June 19, 1895, purporting to be his last will and testament.

On said day he was in the bank of Hungate, Ward &

Company, at La Harpe, Illinois, and while there asked C. H. Ingraham and J. R. Booth, employes in said bank, to witness his will, and that thereupon the said Johnson in the presence of said witnesses signed said instrument, whereupon each of the witnesses in the presence of said Johnson and in the presence of each other signed the same as witnesses; that the instrument was not read over in the presence of the witnesses; that no discussion or conversation took place at the time concerning the same; that at the time of signing the same the said Johnson had real and personal property situated in Hancock County, Illinois, of the value of at least \$60,000.00; that he had a wife then living, Phoebe A. Johnson; that he had but one child, the said Clara Bishop; that he had but one grandchild, said Roy Bishop, son of said Clara Bishop; that he then had no other descendants living; that his said daughter had no property except five or six head of cattle, some farming implements, about three or four horses, and household goods; that his grandson had no property except an air gun and some toys; that the said purported will devises to the complainant the sum of \$100.00 and a life estate in the said southeast quarter of Section twenty-six, in Township seven north, Range seven west, in the said county, of the reasonable rental value in 1895, \$3.00 per acre per year, being the north quarter of the two quarters east of Colusa, subject to the conditions, restrictions and limitations therein contained, to-wit, that the said Clara May Bishop, being the complainant, who was then living on the premises, should keep the place and buildings in reasonable repair, and pay all taxes or assessments that might be levied against the land, and that, if she should neglect or fail to pay the taxes, the land should be sold or advertised for sale for taxes due thereon, she should forfeit all rights under the purported will to any use or benefit to be derived from the land, and the trustee of the said will was thereby authorized and empowered to take immediate possession of the said premises, and that, if she should remove from the place, the said trustee should take possession of the same and rent it out and the net pro-

ceeds of the rent after paying all taxes and for necessary repairs on the place should be paid to the said Clara May Bishop in person, and that any sale, transfer or mortgage of her interests under and by virtue of the said purported will should be null and void; that the said purported will gives the complainant no other property whatever, but gives to the said Roy J. Bishop, the said Johnson's grandson, his gold watch and chain and \$500.00; that the said purported will gives to the said Johnson's said widow, being his third wife, certain chattel property in and about the house and premises at the time of the said Johnson's death, and the use or income of their residence in La Harpe, to be paid quarterly, and provides that each and any sale, transfer or mortgage of any of her rights under and by virtue of the said purported will shall be null and void; that the said will provides that none of the purported testator's real estate shall be sold, but that the same shall be rented and his cash funds loaned on real estate security, and that the net annual income derived therefrom after paying the legacy to his said wife, and all taxes, repairs, and other proper charges, shall be delivered to the City of La Harpe, Hancock County, Illinois, to be appropriated annually to the support of a school in the said city, the tuition of which school must be free; that the said will further provides that upon the death of said Johnson's wife and daughter or either of them, the property or fund the deceased had a life interest in, together with all accumulations and any and all other property he might leave disposed of by the previous provisions of the will should be delivered to the said City to be held and owned by the said City forever in trust, to create and establish a fund to be appropriated, the annual income thereof, to the support of a school in the said City, the tuition of which school must be free, the City Council of said City managing such funds and estate and paying the annual income to the support of such free school as said Council shall see fit, the real estate not to be sold, but rented out, and the cash fund loaned on real estate security; that the said purported will further appoints and constitutes John H.

Hungate executor, and also trustee, to hold, manage and control the said Johnson,s estate, real and personal, and the inrcease and accumulation thereof until the time arrives as limited in the said purported will to vest the said estate in the City of La Harpe, and directs that the court having jurisdiction of the probating of the will shall require of the trustee such bonds as shall be adequate to protect and preserve the estate, and, in case of the death or refusal to act of said trustee, then the Master in Chancery of Hancock County, Illinois, may be appointed his successor in trust under this will; that the other provisions in the said will are that the alleged testator's just debts and funeral and administration expenses be paid, and that the insurance he was carrying on the house and personal matters where he resided was to be kept up, and, in case of loss or damage by fire or otherwise, it is to be replaced in proper shape, and whatever the insurance lacks of paying for it is to be paid from the income of the estate; that the said codicil directs that the taxes, repairs and painting needed on the premises willed his wife be paid from the income of the estate, and that, if the buildings be damaged or destroyed by fire or otherwise, they are to be repaired or replaced the same as they are, with the exception of the barn, which, if entirely destroyed, need not be rebuilt, and that any and all leases which the said Johnson should make which have not expired by their own limitations at the time of his death, are to be in full force and effect until they expire by their own limitation; that the said purported testator in his said codicil requests the City of La Harpe through their proper officials to see that their family lot in the graveyard and the stones and monuments thereon are kept in a proper state of repair in consideration of his gift to the said City, but there is no penalty attached if they fail to do so, "as I have made the gift for the benefit of the young who are to take their places as men and women in the world and do not wish them to lose the benefit of the gift by the neglect of others;" that said codicil was witnessed by the

same parties who witnessed the alleged will and is in the handwriting of said Johnson.

After the said 19th day of June, 1895, he continued to visit his daughter during the summer and fall of 1895, at her home on said farm near Colusa and eat with her and remain over night; and that during this time their relations were pleasant and friendly; that in the summer or fall of this same year 1895, and while his daughter was living on his farm near Colusa, a Mr. Symmonds, who wanted to rent the farm went to see Mr. Johnson. and when Johnson spoke to him about his daughter remaining on the farm Symmonds told him that she had sent word by him that she would like to stay on the place; that thereupon said Johnson replied to Symmonds, "Why the dear child can stay there as long as she wants to, of course she can. She is all the child I've got and will get what I have got when I am done with it;" that in December, 1895, Johnson said "If I was sure I was going to die and I could have every dollar that I possess in money I would like to stick it in the fire and see it burn and I would die the happiest of any one. Then I would be sure none of the damned Rappalees and the damned lawyers could get any of it;" that in about the spring of 1894, Johnson went to see a tenant on one of his farms and tried to induce him not to vote for the building of a new school house in the school district, because he said it would make his taxes higher; that on another occasion he went to a school director in a country school district and urged him not to have a new school house built for the reason that it would make his taxes too high; that in 1898 when an election was about being held in the City of La Harpe on the question of the building of a new school house and issuing bonds for the payment thereof he said that a majority of the citizens of the town had been educated in the old building and he did not see why in the hell and God damnation the building was not good enough for their children; that in the latter part of the summer of 1898, one of the citizens of La Harpe said to him that in that election, referring to an election in La Harpe to determine about build-

ing a new school house and issuing bonds for the payment of the same, there were persons voting taxes on taxpayers who owned no property, and Mr. Johnson made this statement, "That school house I believe, stood for about forty years, and that it had been good enough to educate the majority of the children of La Harpe and ought to be good enough to educate their children;" that one morning in March sometime in the years between 1894 and 1897 he was met walking from Carthage towards Ferris on the railroad through a snow storm when a train of cars passed him going from Carthage towards Ferris and when asked why he did not wait and take the train replied that he had plenty of time and would walk from Carthage to Ferris any time for twelve cents; that the distance from Carthage to Ferris is about four or five miles, and that the snow storm at that time was three or four inches deep; that about 1894 or 1895, while the funeral services were being conducted in a neighboring church, he untied from a gas pipe or rod running through some posts placed six or seven feet out from the sidewalk in front of his premises to protect a lawn or grass plat between the sidewalk and the posts, the team that was hitched to the hearse and left it standing without being fastened or secured in any manner, the hearse being empty, while the driver of the team was in the vestibule of the church; that when the driver saw that the team was untied and came to the same, Johnson claimed he had no right to tie the team there and swore at him for tying the team to the gas pipe or rod, although the hitch racks in the vicinity were all full and there was no other place to tie the team and the day was blustery, and said he (Johnson) did not give a damn if the team ran away.

In 1897 he said in a conversation, "I am going to fix things so that after I am dead and gone I will control my property for ninety-nine years after I am dead, and by hell, the damned lawyers shall not get any of it, either, by hell;" that in 1905 in a conversation with one John Lofton, he made inquiries concerning old neighbors and was told by Mr. Lofton where they had moved and other

particulars concerning them; that in a few moments he repeated his inquiries concerning the same people and in the same conversation said to the said Lofton, "I am having a good deal of trouble. I have a notion to shuffle myself off," to which Lofton replied "I don't think a man of your ability and who has accumulated so much wealth ought to take that position. You are at the age now you ought to enjoy your property," to which Johnson replied, "That it is a good deal of trouble. I don't know what to do with my property;" that about 1903 Mrs. Lincoln approached him for a contribution for church work, when he informed her that his money was tied up and went on to say that the La Harpe people would be surprised when they found out what he had done for them, to which Mrs. Lincoln replied that she hoped he had done right by his child, and that thereupon Johnson made no reply, but took out his handkerchief and cried; that in 1901, while talking to one Hobart, about making him a deep well and after getting Hobart's terms, wrote it down in a little book at the time, telling Hobart that he did not pretend to remember anything any more, and had not for six or eight or ten years; that in 1903, when one Trout, a tenant, went to pay his rent amounting to \$131.00, according to a written memorandum that had been made between the parties and held by Johnson, but at the time in the bank and not present at the time of the conversation, Trout insisted that he owed Johnson \$131.00. Johnson told him he only owed him \$100.00. Johnson wrote a check to be signed by Trout for \$100.00 which was signed by Trout. After talking a while Johnson said "I believe you owe me \$21.00 more," Trout replied "I owe you \$31.00 more," Johnson said "you don't," and Trout filled out a check for \$21.00 and gave it to him.

In the afternoon Johnson met him and tapped him on the shoulder and said "You owe me \$10.00 more;" that in the month of June, 1905, while his step-daughter, Mrs. Bennett, was visiting him, he would, after looking around in a furtive manner to see that no one was looking, hug her and kiss her and ask her to love him;

that during the last four months of his life he was frequently restless and especially at night, did not sleep well and at times had to be put to bed by force. He would often get out of bed in the night time and go around the house, get lost and would have to be taken back to bed again, would sometimes cry out Fire! Fire! and often hollow that there were thieves in the house and would cry thieves! and murder! and would go about the house searching for something as though looking for thieves, would have to be helped to bed, would sometimes take a lighted candle under the bed and into the closet and other dangerous places, so that a light had to be kept away from him, would sometimes strike and fight his wife and would often, when they were attempting to put him to bed, stand for half an hour half undressed and would grab hold of the bed and would have to be put to bed by picking him up and laying him therein; that during this time he would hide his pocket book and then forget where he had put it; that on one or two occasions he burned his pocket book and on one occasion during this time burned money; he gradually grew worse and weaker and finally ate but little, if anything, and died on February 18, 1906, of senile dementia.

Have you, from the above supposition, an opinion as to whether or not Benjamin F. Johnson was of sound mind and memory at the time he made his alleged last will and testament, in evidence in this case, on June 19, 1895? If so, what is that opinion?

Upon the supposition that the matters read to you in the hypothetical question propounded to you are true, have you an opinion as to whether or not the said Benjamin F. Johnson was of sound mind and memory at the time he made the alleged codicil to his said alleged will on July 23, 1897? What is that opinion?

If insanity, including senile dementia, be a departure from the natural habit of thought, feeling or action, without adequate external cause, as Andrew Combe defined it, or a change of character due to disease of the brain, as said Ray, the author of the best jurisprudence of insanity

written in his day, accepted and elaborated this definition of non-infantile or juvenile mental aberration, where is the dementia senilis in this case?

Or, if insanity, or dementia terminalis, or dementia senilis, or dementia in any of its definitive forms, be a change in the normal mentality of the individual as compared with his natural self, brought about by disease involving the brain, what are the evidences of morbid mind in the preceding hypothesis?

If insanity be a state of brain and mind because of which the afflicted individual reveals himself to others as out of normal psychic harmony with his natural self and usual environments, what insanity is there in this biography?

What and where and how much, irresponsible mental aberration is there apparent in this hypothetical record of a life?

Finally, what evidence, logical, common sense or scientific, is there in this detailed life history and all the facts and circumstances connected with it, to justify a conclusion of senile dementia and consequent testamentary incompetency?

This will bears the evidence, *prima facie*, of a sane and not senilely insane brain. Its execution in the handwriting of the testator and letters submitted in the testator's handwriting referring to himself, his age and his disinclination to engage in harassing business not reasonably compatible with his desire and need of rest and freedom from unnecessary business care, confirm the *prima facie* conclusion.

An analysis of the preceding document from the standpoint of the alienist psychologist will appear in the next issue, in which anyone interested, especially those who maintained the existence of dementia senilis in this case, are cordially invited to take part in brief analysis or criticism.

THE GROWTH OF NEUROLOGY.

BY WHARTON SINKLER, M. D.*

Philadelphia.

* * * * The Section has grown from a small beginning in 1891 to one of the most important and widely known in the American Medical Association.

* * * * Prior to the year 1891 there was no section devoted to this branch of medical science. In 1887 a new section was formed and this was called the Section on Medical Jurisprudence, Chemistry and Psychiatry, and this by expansion began to include the consideration of nervous diseases. In 1891, the subject of neurology having become so prominent in the discussions of the Section, the title was changed to the Section on Medical Jurisprudence and Neurology. In 1900 the scope of the Section had become such that it seemed advisable to again change the name, and it then became the Section on Nervous and Mental Diseases. Thus we have kept abreast of the progress in neurology throughout the world.

The list of men who were influential in the organization and development of this Section is well worth considering, for it contains among the names those of the brightest lights in neurology in this country. As chairman of the Section on Medical Jurisprudence, begun in 1887, are to be found the names of E. M. Reed, J. G. Kiernan, T. B. Evans and T. D. Crothers. In 1891, in the Section on Medical Jurisprudence and Neurology, H. N. Moyer was elected chairman. He was followed by Charles K. Mills, in 1892, and in regular order came J. G. Kiernan, D. R.

*Abstract of Chairman's Address before the Section on Nervous and Mental Diseases, at the Fifty-Seventh Annual Session of the American Medical Association, Boston, June 5-8, 1906.

Brower, T. D. Crothers, W. J. Herdman, C. H. Hughes, Frederick Peterson, H. T. Patrick, H. A. Tomlinson, R. A. Dewey, F. W. Langdon, F. Savary Pierce and J. H. McBride.

To those who can look back thirty years, it is amazing to consider the progress in the knowledge of the diseases of the nervous system. Until the latter half of the nineteenth century, no special attention was given to this branch of medical science in the schools, and few physicians ventured to claim neurology as a specialty. How different it is now! There is not a college of any size in the country which has not a chair of nervous and mental diseases, and almost every city has its neurologic society. The interest taken in neurology has increased in the profession at large, and this is shown by the large attendance at the meetings of this Section by members of the Association whose practice is not especially devoted to nervous diseases. It has been for years the custom of the general practitioner to regard the study of nervous diseases as not only difficult and obscure, but unprofitable, and for this reason he has put it aside and felt that there was no use in trying to do anything in the way of diagnosis or treatment of a case of nervous disease. It is different now, and the effect of teaching in the colleges is obvious to every one who meets the general practitioner in consultation. The meetings of the Section have each year been of greater interest and value to the members, not only in the character of the papers presented, but in the discussion of them. This year I can point with pride to our splendid program, which will be seen to include not only many papers on mental diseases, their etiology, pathologic anatomy and medico-legal relations, but the consideration of many organic and functional nervous diseases. It is noteworthy also to observe that the papers presented are not merely reports of individual cases, but a critical and scientific study of the nature of the various diseases considered. No attempt has been made to present a symposium on any special subject, for the reason that this would have taken so much time that many valuable papers would

have been of necessity excluded. As it is, the papers offered have been in excess of the number allowed by the by-laws of the Association. This number, as you know, is forty. Had we been able to accept all which have been presented, there would have been at least fifty, and it is much to be regretted that many important contributions had to be declined on account of the program being full when they were presented. I believe that in the future it will be a wise plan to limit the time for the reading of each paper to twelve minutes and the discussions to five minutes, so that all papers which are offered may be presented before the Section. I am not in favor of requiring that the papers shall be read in abstract, as this mars their interest and value, but by excluding lengthy histories of cases and condensing pathologic reports it would be easy to present almost any paper in the space of ten or twelve minutes.

An innovation this year, and I believe that it is one which will accrue to the advantage and importance of the Section, is that of printing and distributing the transactions of the session. This will include all of the papers and discussions, together with anything else of importance connected with the session. Some of the other sections have published transactions, but this is the first time that the Section on Nervous and Mental Diseases has undertaken the task.

HOMO SEXUAL COMPLEXION PERVERTS IN ST. LOUIS.

NOTE ON A FEATURE OF SEXUAL PSYCHOPATHY.

BY THE EDITOR.

MALE negroes masquerading in woman's garb and carousing and dancing with white men is the latest St. Louis record of neurotic and psychopathic sexual perversion. Some of them drove to the levee dive and dance hall at which they were arrested in their masters' auto cars. All were gowned as women at the miscegenation dance and the negroes called each other feminine names. They were all arrested, taken before Judge Tracy and gave bond to appear for trial, at three hundred dollars each, signed by a white man.

The detectives say that the levee resort at which these black perverts were arrested, is a rendezvous for scores of west end butlers, cooks and chauffeurs. Apartments in the house are handsomely furnished and white men are met there. The names of these negro perverts, their feminine aliases and addresses appear in the press notices of their arrest, but the names of the white degenerates consorting with them are not given.

Social reverse complexion homosexual affinities are rarer than non reverse color affinities, yet even white women sometimes prefer colored men to white men and *vice versa*. Homosexuality may be found among blacks, though this phase of sexual perversion is not so common or at least has not been so recorded, as between white males or white females. I have recorded but one male instance in my own personal observation, viz: that of gentleman

George, for a time a valet and later a cook who loved to masquerade in woman's attire including bonnet and shoes and could never be induced to wear any shoe but a woman's soft gaiter and who had pierced ears for rings and wore the latter at times when not laughed at too much and when they were not in pawn, for he was impecunious and easily victimized by peddlers from whom he would buy chromo pictures, mantel clocks, rings and women's combs and ornamental trinkets at fabulous unfair prices.

George's peculiar predeliction was for white men. He would say he "had no use for niggers" though he made his home for awhile with an aged and kindly colored woman acquaintance who trusted him for board when out of funds.

George had many foolish ways and dress propensities for a man, such as preferring a chemise for a night shirt. He had a right inguinal scrotal hernia requiring the constant wearing of a truss though he was exceedingly careless about this and suffered frequent pain because thereof, requiring my assistance. He had normal appearing masculine genitalia and could have raised a slight beard and mustache though he kept himself closely shaven, he wore his hair long though its growth was rather scant.

A Moll, Krafft-Ebing, Havelock Ellis or Kiernan might find material in St. Louis for further contributions to their studies of reverse sexual instinct. The *contraire sexual empfindung* has had other illustrations here. St. Louis has duplicated the woman stabber of Berlin since she set her mark at a million inhabitants. These perverted creatures appear to be features of million peopled cities and they come into the light, if the police are vigilant. The reverse erotopath abounds among the nerve center degraded as well as the insistent and persistent erotopath of cliteromania or satyriac imperative propulsion.

NOTE.—These St. Louis negro perverts gave feminine names that might belong to English or American ladies of any city. The curious may find them and the names the blacks assumed at the record office of the police courts.

THE

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CHAS. H. HUGHES, M. D., Editor.
Editorial Rooms, 3872 Washington Boul.

HENRY L. HUGHES, Manager and Publisher.
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EDITORIAL.

[All Unsigned Editorials are written by the Editor.]

THE AMSTERDAM CONGRESS of Psychiatry, Psychology, Neurology and the Care of the Insane, held from September 2nd to 7th, was an important meeting of eminent alienists and neurologists in the interest of psychological and philanthropic advancement, having also for one of its chief and highest aims the greater welfare of the insane.

The medal given to the attending delegates, whose numbers approximated one thousand physicians and philanthropists, bears the likeness of the handsome, amiable, philanthropic and much beloved Queen of Holland, who gracefully gave her presence to this important congress, with the inscription, "Konigin Wilhelmina, Congress International de Psychiatrie, Neurology, Psychologie et Assistance des Aliénés, 1907, 2-7, Sept., Amsterdam.

It is a good omen for the welfare of afflicted humanity when Queens and other ladies of high estate and power actively interest themselves in the patronage and promotion of movements of this kind.

The Hollander has a historic record for courage, integrity, charity and pertinacity of character in good work. These traits are in the blood of all the noble Netherlands, and the Queen and her noble consort only emblem the national traits.

Beautiful and stately Amsterdam, with her grand institutions memorial of Holland's power to dare and to do in humanity's highest interests, is but one of many beautiful cities representative of her glorious record in contributing to the scientific interests, arts and general welfare of modern civilization, for there is historic Leyden, which preferred its university to omission of taxes, and classical Utrecht, the now world-famous Hague, and the rushing, busy Rotterdam.

Doctor Van Raalte, Minister of Justice, delivered the opening address. Professor Jelgersman followed and in accord with all alienists and neurologists, he noted the strenuous life of our time and warned against the over brain pressure in schools. Notwithstanding Holland provides playgrounds in all the parks and sand lots for smaller children, overstrain and mental discontent and sequent neuropathies were noted and discussed. The scientific meetings were held in the famous old University.

The care of the insane had an exceptionally prominent place in the assembly. Doctor Vandeventer, of Holland, Dr. Shuttleworth, of London, and others making valuable contributions on the trained attendant aspect of the subject.

Dr F. M. Mott, of London, illustrated and discussed the effects of alcohol on the brain and its role in the causation of insanity as reported from different sources of clinico pathological experience, varying from eight to twenty per cent.

He regarded alcohol as rather a contributory than exclusive cause of insanity among the records of causes, giving to hepatic sclerosis the prominent place it has already acquired as a sequence of alcoholism, while Dr. P.

Schroeder emphasized the precedent mental depression and neurone degeneration of chronic alcoholism as causative of melancholia and other forms of insanity.

Dr. Theo. H. Schroeder presented the damaging effects of alcohol on the brain and discussed brain degeneracy as both cause and effect of alcoholism. Nothing however, unalterably definite beyond what is now current knowledge was evolved in the alcohol discussion, and the same may be said concerning the symposium on hysteria. The remarkable disease of multitudinous and various symptom complex appeared in different aspects to the different observers as normal woman generally.

One of the most interesting features of the Congress was the electrocution and electric resuscitation demonstration on a rabbit by Mlle. Robinovitch, of New York, assisted by Dr. Carlos F. McDonald.

The visit of the congress to the hospital "Endegeest" for the insane at Oestgeest was one of interest to all, revealing a modern well-equipped institution with recreation grounds etc., through Drs. Jelgersma, Jansens and the Sisters of Charity, Bloemendaal. The tranquilizing water immersion for violent maniacs is in successful use at this institution and proves a satisfactory psychotherapeusis.

Holland has provision in her hospitals now built and designed for all of her present and prospective insane for sometime to come, upwards of six thousand.

The officially accredited delegates from the U. S. Government were: Doctors Henry G. Beyer, Medical Inspector United States Navy; E. H. Brush, Physician in chief, Superintendent Sheppard and Enoch Pratt Hospital, Baltimore; Charles H. Hughes, Dean and Professor of Psychiatry, Barnes Medical College, St. Louis; Smith Ely Jelliffe, Editor *Journal Nervous and Mental Diseases*, New York City; W. W. Keen, F. R. C. S., Professor of Surgery Jefferson Medical College, Philadelphia; Carlos F. MacDonald, Professor of Mental diseases, Bellevue Hospital Medical College, New York City; W. A. White, Superintendent of the Government Hospital for the Insane, Washington; Mary M. Wolfe, Chief Resident Physician at the

Female Department of the State Hospital of the Insane at Norristown, Pa.; Louise G. Robinovitch, Editor *Journal Mental Pathology*; Wm. W. Keen, Philadelphia; G. A. Blamer, Providence, R. I.

Delegates of Scientific Societies and Staffs of Journals were: American Med. Psychological Society, Dr. H. M. Hurd; ALIENIST AND NEUROLOGIST, Dr C. H. Hughes, Professor of Neurology and Psychology, Barnes University, St. Louis; American Neurological Association, Dr. Richard Dewey Wauwatosa, Wis. and Dr. Smith Ely Jelliffe, New York; American Society for the study of alcohol and other narcotics, Dr. T. D. Crothers, Dr. Alex Mc. Nicholl, New York; Boston Neurological and Psychiatric Society, Dr. Elmer Ernest Southard, Harvard Medical School, Pathological Department, Boston; Michigan, Dr. Theophil Klingman, Chief Neurologist University Hospital, Ann Arbor, Mich.; Medico-Legal Society, Dr. Clark Bell, President Medico-Legal Society of New York, etc.; Montreal, (Canada), Dr. D. A. Shirrès, Montreal; Milwaukee Medical Society, Dr. W. F. Bock; New York Neurological Society, Dr. Albert Warren Ferris, New York, Dr. Joseph Collins, Professor of Psychiatry, Post-Graduate Medical School, New York, Dr. Adolph Meyer, Professor of Mental Diseases, Ithaca, Dr. B. Sachs, New York; Philadelphia Neurological Society, Dr. Carl D. Camp; Omaha Medical College, Prof. Carter; and other Western Americans. Ireland: Royal Academy of Medicine of Ireland, Dr. Conolly Norman, M. D., Dubl., (hon. causa), Vice-President of the College of Physicians and Medical Superintendent of the Richmond Lunatic Asylum, Dublin, Dr. W. R. Dawson, M. D., Dublin, F. R. C. P. I., Medical Superintendent Farnham Private Lunatic Asylum, Dublin, Dr. John Lentaigne, F. and Member of Council and Vice-President Royal College Surgeons, Medical Visitor of Lunatics under the Lord Chancellor of Ireland; Royal College of Surgeons, Dr. Conolly Norman, M. D., Dr. W. R. Dawson, M. D., F. R. C. P. I., Dr. John Lentaigne, F. B. C. S. I.; Trinity College Dublin, Dr. W. R. Dawson, Dr. Conolly Norman; Royal College of Physicians of Ireland, Dr. Ninian Halkiner.

Dr. Frank, of Zurich, announced that arrangements had been consummated for an international institute for the study of causes of mental and nervous affections. The King of Italy has offered the use of a villa near Lugano, but later the institute will be transferred to Zurich in Switzerland.

THE TWENTY-NINTH YEAR in the life of the *Alienist and Neurologist* begins with the next number after the present. Its editor and founder believes it has fulfilled its birthday promise to give to the general practitioner, especially, and to the Alienist, Neurologist and Psychologist also, clearer conceptions of Neurological, Psychological, Neu-riatrical and Psychiatrical medicine. Its birthday prophecy also dawns in fulfilment viz: that "Neurology and Psychology are destined to reign paramount in medical thought."

The *Alienist and Neurologist* approaches the New Year prosperous and hopeful of further prosperity and usefulness in its chosen lines of professional endeavor and with hearty thanks for the generous support, financial, collaboratorial and otherwise contributory, it has so lavishly received from capable sources of appreciation in the medical profession. It notes and acknowledges with gratitude the wonderful advances since its foundation, in Psychiatry and Neurology, especially, among the master minds in medicine who have contributed to its pages and advanced it in professional appreciation and financial success.

NIGHT MEDICAL SCHOOL NOT SATISFACTORY TO STATE BOARD.—"The Missouri State Board of Health has decided that medicine cannot be adequately taught in a night school, and has announced that it will refuse to examine for a license to practice graduates of a night school recently established in St. Louis. The college has a charter from the state, and contends that its graduates should stand on the same footing as those receiving their training in the schools of the ordinary variety, and will take the matter into court," and the courts will decide, if

the teaching facilities are adequate and the faculty are not fake physicians, to sustain the night school. These are the places, where if rightly conducted, the ambitious, determined, dilligent, enthusiasts, compelled to labor for a livelihood during the day like Brown, the distinguished pupil of Cullen, Abraham Lincoln, Stephen A. Douglas and Elihu Burrit, the learned blacksmith, and the hosts of self-made eminent men have been helped in their steps upward to fame. Regulate rightly but do not suppress these schools for the ambitious and deserving.

Remember the struggling life of many a worthy medical student and avoid any tyranny of decision that may embarrass worthy endeavor in meritorious directions. The world yet needs good self-made, difficulty surmounting physicians, men of the midnight oil kind and class, content "to labor and to wait" for fame.

AN EASTERN RABBI rabidly "raging like the Heathen and imagining vain things," calls the medical profession "cruelly and criminally ignorant and far behind what it was two thousand years ago." Recalling from historic records of the ancient days, the brain-racking trouble good old Moses had, with these masters in Israel and their followers, to keep them level-headed and from following after strange Gods, we are pained to see our noble profession in peril of assault from the same source.

By dint of ceaseless perseverance, plague visitations and a surgical operation the aforesaid ancient lawgiver succeeded in making the most of the children of Israel fairly good citizens, but the mosaic efforts seem to have been fruitless with this special and particular Rabbi who displays some of the atavic uncharitable cussedness of some of his incorrigible, unreasonable ancestors in this uncalled for and untrue attack.

KRÆPELIN'S CRITIC, DREYFUS, does not betray in his criticism of Kræplin's term *manic depressive insanity* as applied to *melancholia* such broad and varied psychiatric clinical experience as would warrant his sweeping criticism and Kræplin himself seems not to have finally and fully settled where he will finally place his term *manic depressive*

insanity. Melancholia has such a symptomatic feature, but mania is not an ordinarily associated characteristic or accompaniment of the unusually toxic psychosis of depression, handed down to us from our ancient fathers in psychiatry labelled the black bile malady of psychic depression.

DEPRESSIVE INSANITY will do for most of the phases of melancholia described in Kræpelin's *Lehrbuch der Psychiatrie*, but the prefix manic is clinically *mal à propos* in the English sense of the adverb or adjective term manic and will probably never be acceptable as applicable to any form of depressive insanity or melancholia save such as may pass into maniacal delirium or have paroxysms of maniacal delirium alternating or associated with psychic depression. Kræpelin includes features of *folie circulaire* hypomania and stuporous insanity and cases wherein the first attack shows sixty per cent of depression.

There is such a phase of mental aberration as manic depressive insanity, but whether Kræpelin has definitely differentiated it with the exactitude that justifies a psychological species is a question to be taken under further consideration by the judicial-minded and clinically observant in the domain of practical alienism.

STUTTERING TREATMENT ACCORDING TO SCRIPTURE.—Dr. E. W. Scripture, in the *Medical Record*, May 11, 1907, describes a psychological and phonetic method of curing stuttering. He treats of superenergetic phonation, in which there is an excess of nervous discharge to the vocal organs, and tonic and clonic cramps at various points. Breathing exercises first teach control of the diaphragm and thoracic muscles. Control of the larynx is then taught and of the tongue and lips in articulation. Next the letters phonetically, and the patient educated to produce any one of them at will. By this method reading becomes automatic. He first learns to seize hold of the thought and not to lose it on account of his embarrassment. He describes objects slowly and finally reaches perfect conversation.

POLIOMYELITIS ANTERIOR due to cows milk is the inference of medical letter writer—Dr. Labine—in the *Record*, based on the time of year and the age at which children are usually afflicted with this affection of the cord.

THE NEW SCIENCE-EUGENICS and the possible dangers of salt hypodermics are also interesting editorial themes of the *New York Medical Journal*, Oct. 19th ult. An indication of inadequate nursing is another editorial theme.

THE MILLION MARK for St. Louis was assured when through aid of medical and chemical science she gave her people pure bacteria free water. More population will be assured when she in other matters advances along right sanitary lines and frees herself of dust and dirt and needless noise, gets more parks, baths, better tenement houses and some toilet privileges outside of the hotels and saloons, for the stranger within her gates and abates the speeding, killing auto car and the destructive railway, and provides park playgrounds for her school children, etc., etc., etc.

THE LAST ALMSHOUSE LUNATIC and dement in Illinois goes from the careless and generally ignorant and uncharitable care of the political almshouse keeper in that state September second to the several district State Insane Hospitals where all such unfortunates properly belong. This should be so in all of the states.

THERAPEUTICALLY ENJOINED SELF-DENIAL of habitual food or drink or of any other long indulged habit is trying enough to most well people, but to enjoin abstinence from long accustomed tastes and appetites that have not led to illness and will not, except in great excess in the accustomed person, is non-therapeutic and a source of a psychic intense irritation and fretful longing, which it were well, from a psycho-therapeutic standpoint not to persistently insist upon. In certain diseases, and epilepsy is one of them, needless irritation of the brain of such a patient is

not good practice and too great denial of accustomed food and its usual seasoning is a source of psychic disturbance which the wise prescriber will avoid. We should put ourselves in the patient's place in all our injunctions of abstinence from customary enthralling habits, where, with safety such habits may be permitted. Especially should we refrain from permitting a moderate amount of salt for unseasoned food, in the case of epileptics. We should simply explain that many foods contain salt and that they should use the least amount of salt necessary to make the food palatable to them. Unpalatable food does not adequately stimulate the gastric mucosa and the secretion of pepsine. The inhibition of salt in view of its potency when injected in normal solution into the blood to revive and sustain failing heart and other life function, seems a peculiarly irrational injunction in the therapeutics of an exhausting paroxysmal disease such as epilepsy is.

THE COCAINE FIEND.—The *New York Medical Times* makes the following startling editorial statement: It is probable that cocaine has taken the place of opium as the drug which, when improperly and wrongly employed, is most hurtful in its effects upon the human race. It is not only the adult who oftentimes succumbs to it, but it appears that even little school children are now forming a pernicious acquaintance with it. It is observed by the *New York Tribune* that if the Legislature of the State of New Jersey regards the appeal of many mothers whose children have been attending public schools in Newark, the law regulating the sale of cocaine will be amended so that the penalty for its violation, which is now much too lenient, may be fixed at the discretion of the judge. These mothers have naturally become both anxious and indignant since it was discovered that not a few of the pupils in the schools on Camden and Morton streets, some of them as young as ten years, have become addicted to the use of cocaine. There is also a natural indignation and consternation among the principals and teachers in these schools. The drug seems to have been introduced through the agency of

three depraved youths who have, it seems, been acting in the interests of a more depraved set of older victims. The three boys, it seems, had, as agents, been carrying on a lucrative trade among the older children. By means of these discoveries were teachers enabled to explain why certain pupils had shown a gradual and quite unwonted falling-off in their studies. The tempted children had been lured to a candy store near the schools, when since March last they had been spending the pennies intended for ice cream, pies and candies for the poison which was sold to them by unscrupulous vendors, who, moreover, instructed them in its use.

It would seem that victims of this "dope" find purchasing it an easy matter in whatever quantities desired. And many medical men are much too incautious in prescribing it. A prescription containing cocaine should invariably be marked "not to be repeated without medical orders." And all our wise and experienced colleagues who work in the nose and throat are very careful in its use. If a choice *must* be made between prescribing opium and cocaine they prefer the former, we believe, as being on the whole less dangerous. It is certain that a large part of the degeneracy in which many among our negro population have fallen is due to cocaine; and, moreover, that many of the crimes which are committed by the unfortunate members of this race are due not to inherent viciousness, but to the effects of this dreadful poison.

Apropos of the preceding editorial we take pleasure in noting that a druggist in New York City is reported by the *Medical Record* as now in prison, the present being his third and severest conviction for the crime.

OVERCROWDING IN HOSPITAL FOR THE INSANE.—As a result of the formal inspection of the Pennsylvania State Asylum for the Insane at Warren, made recently by a special commission for investigating the conditions prevailing in the insane asylums of the State, it was found that, while the institution is in other respects most admirably conducted, it is greatly overcrowded. With accomoda-

tions for a total of 734 patients, 598 men and 582 women have been crowded within its walls, many patients being compelled to occupy cots in long, narrow, ill-ventilated corridors, with low ceilings. There are only 180 employees to take care of the patients, and as these work in shifts, only a small number are on duty at one time. An infirmary for men is badly needed.—*Medical Record*.

This overcrowding evil is becoming general. The St. Louis Insane Hospital built for 250 is similarly crowded with over six hundred.

BRUTAL VIVISECTION BY A BRUTAL MEDICAL STUDENT.—Our humane and worthy contemporary, Dr. Milliken, of the *Medical Review*, thus speaks: "Anything more discreditable, more inhuman, or more abhorrent to all right thinking persons than the recent exploit of a medical student at one of our medical colleges can hardly be conceived. Briefly the said student appears to have taken possession of a dog that did not belong to him and did belong to someone else, apparently in full cognizance of that fact. It is unnecessary to characterize this action. Then he performed a practice operation upon this animal which was his by no title of right, mutilating it and destroying its value to its owner. Finally, instead of either tending it humanely towards recovery or putting the poor beast out of its misery, it was brutally thrown aside in an alley exposed to suffering and cold to die or recover as best it could. Judge Pollard, in imposing a fine of \$50 on the offender is reported to have said, 'If this vivisection is necessary, then it should not be done with such heartless, needless cruelty.' Vivisection *is* necessary, in the interests both of the accretion of scientific knowledge and of practice in operative methods."

But certainly not in this heartless manner. We endorse all the justly humane editor of the *Review* says, and also the following: "One case like this can do more harm to the cause of legitimate animal experimentation than can be undone in a very long time."

The rule of scientific vivisection is and should always be the least possible suffering, the most possible anaesthesia not to impair the result sought, the least possible time for the purpose of scientific enlightenment, the speediest possible repair of the damage, or death by complete euthanasia and the nearest possible euthanasia for the animal during life.

A student indifferent to animal suffering, even in vivisection, is unfit to become a minister to suffering.

DR. BURRELL, THE PRESIDENT-ELECT OF THE A. M. A., was one of the first to make a successful ligation of the innominate artery. Others had re-implanted parts of trephine buttons, but Dr. Burrell was the first to reimplant successfully a whole one. He has spared no pains to perfect his technic. In medical education Dr. Burrell has pronounced views. As the head of the Association he may be expected to speak with no uncertain voice. He thinks that the public is entitled to good surgery. He has urged a retiring age for the surgeon, and on the other hand has called attention to the danger involved in one's taking up surgery after only a few weeks service in a clinic or postgraduate school. He has favored increasing the elective work in the fourth year, and established a system whereby students serve as clinical clerks and surgical dressers during the senior year. This system has been looked on as a basis for similar work in other institutions. Another matter in which he was a pioneer was the establishment of an ambulance corps; he urged this in 1866, and Massachusetts was the first state to realize this important feature. Massachusetts thus became the entering wedge, and the ambulance corps has been established in other states as a consequence.

The educational line of work has received Dr. Burrell's greatest effort. He has been an earnest and persistent advocate of a continuous teaching service. He realizes the dependence of technic on an unbroken period of training and practice. Fearlessly following his conviction that the public is entitled to good surgery, he has labored to make

a man's ability to teach the sole criterion by which to judge his value to the institution. Further, Dr. Burrell has urged the education of the public that it might be fixed in the minds of all that laboratories and research agencies are for the benefit of the people. He feels that it is their due to be informed on many points, and that this work lies at the door of the profession. The work of the committee on Public Instruction will be strongly supported by Dr. Burrell, and he sees a bright future ahead in the co-operation between the profession and the public in the matter of research, public hygiene and prophylaxis.

Dr. Burrell is now preparing the manuscript of quite a pretentious work on surgery, which the Philadelphia publishers, P. Blakiston's Son & Co., will bring out.

A CRUELTY WORKING LAW concerning immigrants taken acutely ill on arrival in U. S. sends them back against their will. This is inhumane and imperils chance of recovery by its hope depressing and destroying effect. Under this law lately an Italian girl coming to meet her affianced in St. Louis was not permitted to land and marry him. She is now reported insane. She probably has the delirium of fever and unrequited love, not insanity. The line should be sharply drawn between heredity or chronic insanity and the evanescent delirium of a fever and love disappointment. Lovers from Europe not hereditarily defective or otherwise undesirable should not be debarred from meeting and marrying in America. Healthy foreign blood in rightly intentioned lovers should be encouraged to blend for the future good of this country.

THE HEALTH RIGHTS OF THE CITIZEN include noise as well as smoke and dust and other nuisance abatement. The screeching auto and the noisy newsboy, the noisy beef, dairy and market wagons should not be permitted to awaken tired citizens out of needed rest in night or morning hours.

BARNES MEDICAL COLLEGE merges into the Medical Department of the University of the State of Missouri at

the close of the present session, 1907-08. The 1907-08 students, will be registered the same as heretofore for this year.

LIFE SACRIFICE OF A SURGEON AND PHYSICIAN.—

Dr. Francis Hartman Markoe, one of New York's best known physicians and surgeons, dean of the surgical staff of St. Lukes Hospital, lately critically ill of a cancerous affection at his home, number 15 East Forty-Ninth Street, has since died. Dr. Markoe knew for three months that he suffered from a probably fatal affection but he kept to his duties.

Medical men like brave seaman work to save others while their life still goes down to death.

SOME ALIENIST MEDICAL OPINION testimony, mis-called expert, sometimes reveals a specious style of reasoning, especially where opinion is based upon "reading up" and not on actual clinical observation. Esquirol was not far from right when he said "we must live with the insane in order to rightly understand them" and rightly reason concerning the malady of mental aberration.

Read up alienistic opinion is mere hearsay conclusion and no better from a physician than from a layman. Courts should ask psychiatric experts the question: is your opinion based on what you have read or upon what you have seen of insanity, and that knowledge applied to the hypothesis before you?

RECUPERATION FROM CEREBROSPINAL MENINGITIS.

—This is an adrenal disease. The nerve centers themselves often escaping organic destruction. It is the exudate, the adventitia, the extra neural condition that makes the mischief. This often disappears and complete health returns. But when the eye areas of the brain become involved so that complete blindness ensues this region less frequently recovers than others.

We have seen a cerebrospinal meningitis patient paralytic, deaf, dumb, delirious and sightless, recover from all but the blindness.

A great editor in this city recovered from all these, his affliction having been in his childhood, to master literature, history and the classics, to become a forceful, graceful writer and die of apoplexy after fifty years of age, with but a slight reminder of his grave boyhood malady remaining at his death.

Laura Bridgeman recovered in much the same way but she was overwrought by too much enforced study and thus became an easier victim of pneumonia from which she died through impaired vital resistance.

It is better to give these unfortunates a good chance for recovering a vigorous resisting vitality than to make show case prodigies of them by forcing upon them all the education they will bear till they break in brain power.

AGED AUTHORS, THE TEMPERATE LIFE AND LOUIS CORNARO.—Louis Cornaro the "Venetian Centenarian" who reached the age of one hundred and two, in his first treatise on the temperate life, written at the age of eighty-three in the year 1547, commending to all "divine sobriety," noted that in literature and the sciences the majority of the best and most celebrated works we up to that time possessed "were written when their authors had attained a ripe old age." He called attention to the Greek poet Sophocles and his celebrated tragedy written at the age of seventy-three and who "was by reason of this deed regarded as vigorous and sound minded." In this treatise he mentions the Procurator Thomas Contasini of Venice who lived from 1454 to 1554 and the Knight Anthony Capodisacca of Padua whose term of life was from 1465 to 1555. He concluded "that orderly living is the most positive law and foundation of a long healthy life" and reminds us also in this treatise that "when a physician pays a visit to a sick man he prescribes this as the very condition of recovery." He considered that "the only mode of living that will render secure in the hope of long years in health consists in adopting, at least after the age of forty, the temperate life" and it was after this age, which up to that time had been one of irregularity, intemperance

and bad health, that Cornaro began his career of healthy longevity.

This centenarian had a conception of the *vis medicatrix naturae* in the opinion that "the humors of the body" regulated by the temperate life "resist weakening changes" and he had a pioneer and primitive idea of autotoxicity and its ill effects on health and longevity.

NOAH WEBSTER AS A SPELLING REFORMER did well in his time, as the editors of the leading English dictionaries and our own spelling reformers are doing to-day, aided by President Roosevelt.

We hope the reform will continue until all superfluous silent letters of our own language, permissible to omit, are discarded and all right changes compatible with euphony and the retention of philological remembrance of the paternity of words, shall have been made in their spelling. *Ars longa vita brevis*. Let us get as near to Saxon brevity in spelling as we scientifically can. Saxon brevity of words and laconic speech comport best with this age of phones, phonetics, short hand and strenuosity of action, to sustain which the saving of brain labor in written or spoken words is essential. Neurone expenditure salvage is a problem for the brain-strained, in our day, who would escape premature brain-fag.

THE EGOISM OF THE INSANE is excessively self-centered and morbid, the line of demarkation is disease involving the brain and mind, either in functional or organic derangement of the former.

The egoists among the philosophers of the Cartesian school agnostic as to everything except their own existence and the impression of their own minds, were not insane, (though hovering on the border line of insanity), because disease did not impel their convictions.

Egoism, especially in that form of it called egotism is not uncommon to the sane. If unqualified egotism were a sign of insanity asylums for the insane would be inadequate and the insane of the asylums would be unjustly discrimi-

nated against in their being housed while the myriads of egotists among the world's population outside were allowed their freedom.

The egoism of alienism is a *morbid* one abnormal to the individual. It is a self-centered feeling of depression, or exaltation, ordinarily with delusion, concealed or apparent in either speech or action or both and with brain-disease as its basis. Melancholia often has marked delusion of danger or apprehension or suspicion and is a marked type of morbid egoism. Paresis is the opposite with exalted egoism and confident confiding delusion and paranoia may be like unto either with paramount delusion of danger and persecution.

EROTICALLY INSPIRED OR EROTOPATHICALLY IMPELLED VIRTUE AND VICE are not confined exclusively to either sex. A picture hat, an immaculate shirt waist, jewels galore and a silk skirt may bedeck a feminine sinner, as well as a sinless saint. But of late American juries, when erotopathy is in the atmosphere of the court room, seem oblivious to the fact that the twentieth century has its nefarious Borgias as well as Catalines, when the sexual passion excites the vicious propensities allied therewith.

ANOTHER INSANE STABBER has been slashing human beings in Berlin. This time the victims are infants and children and erotopathy has not yet been connected with the crime. The suspect is under arrest and supposed to be insane because of the indiscriminate selection of his harmless, innocent victims.

These and the various other forms of erotic crime daily occurring over the country suggest more consideration of the psychology and psychopathology of crime and better public precautionary sanitation against perambulating erotopathy.

"BAFFLING TO MEDICAL SCIENCE."—This phrase is heard and often reiterated by the press at some phaze of injury or disease not common in localities and not familiar

to ordinary family physicians, especially in affections of the brain, well-known to neurology and psychiatry.

Out in the interior of Missouri a man was hit on the head by a falling hammer, fracturing the skull. The skull was trephined, the brain was found injured, hemiplegia and aphasia followed and the sensational newspaper correspondent reported the case as baffling to medical science and the doctors are watching and wondering? say the papers as to the cause of loss of speech.

Cases like these suggest a medical monitorship over certain wise young reporters who, like infants, wonder at everything they see for the first time and think all the world must wonder, when they print their crude impressions.

Moderately enlightened modern physicians or surgeons capable of operating could never have communicated such ignorance.

A medical press monitor on the staff might help out some of the kids who send out such "stuff" to the associated press, and such a monitor might increase certain newspaper circulations and help the moral tone of the people, by giving attention to the character of medical advertising and expunging some of the false and immoral features of their medical advertisement department.

THE NERVOUS SYSTEM AND DIABETES WAS PAVY'S theme at the late congress at Lisbon.

The pathogeny of diabetes is not complete with the nervous system omitted. After the pathological anatomy and the mechanism of sugar production, he committed himself to a recognition of the important part which the nervous system plays in the development of this disease, admitting that the evidence from various sides is now too definite for doubt that cerebral action is intimately related to the affection.

Dr. Pavy now believes that the vasomotor system is at fault in this metabolic neurosis. While this admission comes late and the fact is not new to neurologists, it is gratifying to note this step forward in neuropathologic

observation. Readers of the *Alienist and Neurologist* have long been familiar with it.

This view was presented in the editor's address in medicine before the A. M. A. at the San Francisco meeting twelve years or more past.

THE ALTERNATING INSANE AUTOMATISM OF SUD-
DENLY SUPPRESSED EPILEPSY, suppressed by vigorous and full bromotherapy is a subject which should receive more attention in the current literature of Alienism than has yet been given it. We do not refer now to ordinary psychic epilepsy—psychic equivalent epilepsy.

It sometimes happens in certain cases that to completely interrupt the paroxysmal recurrences by the use of powerful doses of the bromides, precipitates a condition of dazed automatism for which the periodic explosive spasmodic paroxysm has been a preventive and cerebral relief, the paroxysm and the after sleep readjusting vasomotor conditions and saving the patient from abnormal psychic display. Smart self-treating patients sometimes bring this condition on themselves by substituting their own judgment as to dosage, for the physicians directions.

A patient whom, under judicious treatment, we had long kept free of epileptic display and of mental aberration, concluded to make a voluntary departure from the legitimate dosage prescribed and abnormality of mental action and maniaphobia followed. Various delusions of suspicion and pursuit followed. The patient attributed his new symptoms to the excessive dose, five drachms of a fifteen grain to the drachm solution of strontium bromide self-prescribed. After this self-prescribing experience the patient wrote:

"I have an awful dread of going insane and think *pro tempore*, I am insane on the subject of being so. At any rate seventy-five grain doses of strontium bromide will be scarce with me in the future. I once took 180gr. of P. D. and Co. Triple Bromides viz.; of soda, potash and ammonia which put me to sleep for a day and a night but they had no effect like this strontium."

Psychic equivalents of epilepsy are common (of which this is but one phase) and in some cases it is perilous to suppress the paroxysm too precipitately especially when due regard has not been previously paid to possible auto-intestinal and ptomaine toxicity.

LAY APPRECIATION OF PHYSICIANS.—The *May World's Work* has an appreciative article on the work of the medical profession by Edgar Allen Forbes, showing that though some people look upon the physician as a Shylock, he is in fact among the fairest and most generous of men engaged in the world's work. With these facts and figures Forbes contrasts the physician and the business man to the credit of the former. The article is a just defense of and compliment to doctors of medicine.

In marked contrast with certain manufacturing corporations and railroads that have suppressed inventions and appliances that would supplant inferior ones and prevent railroad accidents by buying the patents and withholding their manufacture and use, the medical profession does all it can to save life and prevent disease and accident, though these are the "props" whereby the profession "doth live."

NUMERICAL RACE SUICIDE is not to be deplored so much as qualitative racial destruction and the conservation of the lowest and most vicious in the scale of human life—the unfit to live. Nature does much, but not enough, through procreative impotency to prevent reproduction of the unfit. If race suicide were more at the bottom, a little at the self-assumed top and least or not at all in the middle of the social scale, the conservation of the race, especially, of the Anglo-Saxon, Celtic-Norman blood in America might be assured against the final fate for our people warned against by Crichton Brown in his Presidential address to the Sanitary Inspectors Congress to which Ashmead refers, with comment, in the present number of the *Alienist and Neurologist*.

The sin and crime of degenerate propagation is greater in dire results than the sin and crime of race prevention

or suicide of the unfit, predestined to misery and handicapped with proclivity to crime or brain disease or both.

ALEXANDER SMITH makes one of his characters say of a beautiful sinful woman, "Oh! if she had proclivity to sin who did'st appear so beauteous and so pure, nature may leer behind a gracious mask and God himself may be" and then the swooning giddiness and blindness of eroto-psychic-shock-vertigo overtakes him while incoherently questioning the purposes of God.

If Nature's mask were taken off the crimes against the minds and organisms of the viciously unfit to propagate their kind, race suicide by prevention of conception measures among breeders of lunacy, idiocy and nerve center disease and crime would rather be approved as saving than condemned as destroying the race and kind. Nature's mask of the consequences of neuropathic and psychopathic sins of hereditary transmission are not greater than the masking of her precious minerals in the quartz rock. And it is the duty of intelligent man to remove the mask, extract and save the noble metal and destroy or otherwise utilize the dross.

A wise and patriotic eugenics may, with Spartan fealty to race greatness and country approve the suicide, ante- or post-partum of sexual abstinence of the non-eugenic.

Since the evolution of psychopathic science began, psychiatry discerns no heavenly grace in the masking of neuropathic defect under the guise of beauty. Smith uses the term gracious in the Shakesperean sense as applied to Cain the murderer of Abel, viz.: "Since the birth of Cain * * * there was no such a gracious creature born."

IS IT AN EVIDENCE OF PSYCHIC DECADENCE? when an acting prosecuting attorney, sworn to execute the municipal laws refuses to perform his part in its enforcement because he is not personally in favor of what he terms blue laws. This delusive misconception that prosecuting attorneys have judicial powers was displayed by the prosecuting attorney of a St. Louis court recently.

THE TESTIMONY OF A WOMAN on matters pertaining to her erotic life and relations are apt to be tinctured with unreliability. In this sphere of her peculiar mental make-up as well as in her physical adornment she is less candid than man. Her life, after a certain mature age of full comprehension of methods of influence, is more delusive in its display and endeavors toward the other sex than man's and her testimony in matters affecting her chastity or sexual relations are especially liable to be self-extenuating if not wholly untrue and man is prone to put a sympathetic faith in her attestations beyond his confidence in the testimony of his fellow man on similar subjects.

Juries made up exclusively of men are prone to accept without question her sworn autobiography touching her erotic life when she will seldom tell even her own age truthfully, as the Thaw jury mainly believed the more or less apochryphal story of Evelyn Nesbit Thaw, told under the almost strongest possible motive for prevarication, and yet a story which cold critical analysis has been pronounced by Samuel Hopkins Adams a classic lie, whose cold, heartless, recreant author, Adams has likened to Balzac's wicked, dainty and terrible Mme. Marreffe.

The average man of honor would have died under the tortures of the rack before he would thus have blackened his own name and the posthumous memory of the sharer of such shame.

SAJOUS SAYS THE SOURCE OF THE OPSONINS is in the thyroids and parathyroids and he calls opsonins, thyroidoso. Sajous thyroidoso sensitizes while his auto anti-toxin destroys.

TWO HOBOKEN DOCTORS with an undertaker sandwiched between and all in three-story modern brick houses, on a prominent street, present the appearance of mutual prosperity and satisfaction. The undertaker pulls with the doctors and the doctors pull with him probably, and the brethren dwell sweetly together in unity, it is said.

THE FORCE OF MIND IN MEDICINE, which was the theme of the opening paper by Dr. A. T. Schofield before the section on Psychology of the British Medical Association Meeting, at Toronto, last year, has not received the consideration from the medical press up-to-date it deserves.

"The active treatment of the body in disease by forces within itself (as the essayist notes,) guided and directed from psychic centres under the various names of Nature, the *vis medicatrix naturæ*, etc., by means of antitoxins, phagocytes, &c., is widely recognized and used, and has just received a great impulse from the study of *opsonins*, and their bearing on disease."

The extension of methods obviously suggested by this quotation was strenuously insisted upon as proper psychotherapeutics.

A NEW JOURNAL edited by Dr. William Osler and others, *The Quarterly Journal of Medicine*. Associate editors J. Rose Bradford, R. Hutchison, A. E. Garrod, H. D. Rolleston, W. Hale White, and others paying particular attention to the wants of specialists is announced. Vol. 1, No 1, is now ready.

MAKING STEEL AND KILLING MEN is the forceful caption of a contribution by William Hard, to the November *Everybody's*, in which the question is propounded and answered; "Have we in America the same attitude toward human beings that we have towards the linings of blast furnaces? Do we think that a man is good for so much iron and steel, and the sooner he makes it the better? Must he then go to the graveyard just as the lining of the blast furnace goes to the junk heap?"

This is about the idea of the masters of the industrial and transportation life in these United States, at whose birth announcement was heralded to the world the patriot's acclaim that self-evidently all men are entitled to life, liberty and the pursuit of happiness.

A STREET CAR ROADSIDE ILLUSION AND DELUSION.—The rapid transit, besides the ordinary delusion

of its strap-hangers that they are getting the worth of their money on the United Railways has developed the delusion lately that cows on the roadside are no bigger than a man. Such a delusion recently led a passenger to call out the health board and police "trouble wagon" to pick up a used-up man who proved only to be a sleeping cow on the roadside.

But this is not the only delusion connected with the street tramway service. One of the major delusions is that some day there will be cars enough to seat all passengers and a sign hung out, as in other countries, when seats are full, that no strap hangers may board the cars.

Those familiar signs of full street cars abroad "full, voll, complete," etc., are yet only delusive dreams in the United States.

AMERICAN SUPERLATIVES AND DR. MENDEL.—The remark of Dr. John P. Barlow, of Manchester, that "Americans are given to the use of superlatives" applied to commercial description of St. Louis sky-scrappers, shoe factories, etc., "the largest in the world" recalls a speech made by my friend, Dr. E. Mendel, of Berlin, at a dinner before the psychiatric and neurologic section of the Centennial Medical Congress at Philadelphia. The writer sat next to him on one side and Dr. Judson B. Andrews next on the other side. When Mendel arose he explained his first experience in America thus:

"*Gentlemen:*—When I started for this country I knew I was coming to a big country, but I did not know you all knew so well what a great country it is. I asked the man who came to check my baggage when we first landed what was the best hotel and mentioned the Cosmopolitan. He said that was a fine hotel the biggest and best in the world. They would take you in there and do for you better than any hotel in the world. I asked about the post office of another man and he politely directed me to it and said it was the biggest post office in the world. The newsboys had the best papers in the world and the barbers gave the best shave in the world and the boot-

blacks the best shine in the world and one of them said Philadelphia had the biggest doctors in the world, and when I came to this meeting I expected to find you all giants. I know now you are all good fellows, gentlemen and I hope I am not prejudiced by all the big things said about you, but I believe you are the best fellows in the world, and we have some pretty good fellows in the profession of Berlin, likewise, not including myself."

LITHIUM IS A DEGRADATION FROM COPPER, according to Sir Wm. Ramsey, as announced in the *Scientific American* and the discovery must rank with Ramsay's "famous discovery of the transformation of radium emanation into helium." After a solution of copper phosphate has been treated with the emanation and the copper then removed, the spectrum of the residue exhibits the red line of lithium." Thus the transmutation of one metal into another goes on, but not yet in line with the dream of the Alchemists of old that the baser might be transformed in the nobler metals and gold still eludes the man behind the crucible and the test tube.

HEDONIC EROTOPATHIC PERVERSION has caused courts and monarchs to fail and fall. Erotopathic Cyrenianism had Marc Antony, Julius Cæsar, Caligula and other Monarchs and Princes for its victims in final psychopathic decadence. Erotic excesses in brain damaging erotopathic dissipation and their attendant and frequent immorality are not good for Kings or Courts. The Kaiser of the German Empire acted wisely for the welfare of a great people and the perpetuity of a great Empire in dismissing from his court, after the Harden verdict at Berlin, Moltke and his erotically revelling companions.

Moltke has proven to be an ignoble nephew of a noble uncle.

The erotopathic infamous scenes of the Kaiser's courtiers at that round table orgie, as revealed in the famous Harden trial are more than a reproach to any people.

Such orgasms of perverted Aristippian philosophy pre-sage not well for the stability of brains born to control. Such revellings and follies go before destruction of self or descendent and nations, in heirs to kingdom or predestined rulers of men.

But neither Epicurus nor the Cyrenian philosopher, whose teachings were similar to the misjudged Epicurus, ever taught immoderate or morbid indulgence of natural appetites such as wealth, liesure and laxity of normal and moral psychic inhibition lead the luxuriously erotic courtiers to indulge. They had the approval of these ancient philosophers, who "eat, drink and be merry so excessively to-day," that to-morrow die in neuropathic decadence.

"Ill fares the land to hastening woes a prey,
Where wealth accumulates and men decay."

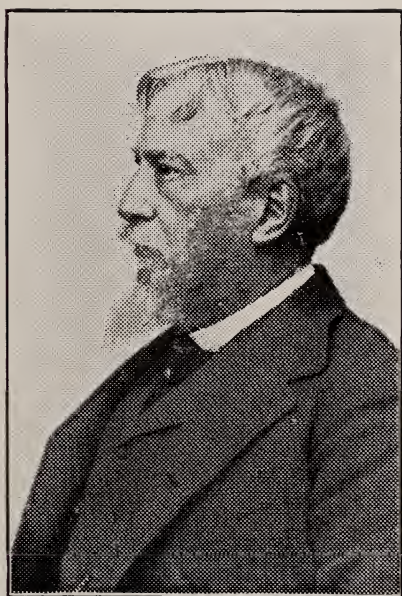
DR. EDWARD K. TAYLOR, physician and lawyer, dean of Hastings Law School, University of California, has been elected mayor of San Francisco, vice Schmitz in jail.

NEW PHASE OF PSYCHOLOGICAL EXPERT TESTIMONY.—Hugo Munsterberg in the September and October *McClure's Magazine* very properly proposes psychologic tests of the credibility and capacity of witnesses for correct observation based on the results of a series of experiments with his students at Harvard.

DR. ALBERT WARREN FERRIS, of New York City, has been appointed by Governor Hughes as president of the State Commission in Lunacy, to succeed Dr. Charles W. Pilgrim resigned.

MENDEL, SANSOM, HITZIG, STEFFANI, FOSTER, BROADBENT AND ATWATER have finished their work and gone over the great divide that separates time from eternity, But their indellible impress on thes ciences they wrought in abides with us for all time.

DR. JULIUS GRINKER has been appointed Consulting Neurologist to the Cook County, Ill., Hospital for the Insane.



DR. S. WEIR MITCHELL.



THE FICTION SERIAL of *The Century* in 1908 will be a new historical novel by Dr. S. Weir Mitchell, to be entitled "The Red City." This new novel by Dr. Mitchell is a companion to his famous "Hugh Wynne." While the former was a story of the time of Washington the General, the new one is of the time of Washington the President.

Medical men like Weir Mitchell, Oliver Wendell Holmes, William A. Hammond, Daniel G. Brinton, Conan Doyle, Frank Lysdon, James G. Kiernan and hosts of others have added to the popular appreciation of minds trained to medical research and thought by their contributions and auxilliary science more than by their work within the pale of their profession.

S. Weir Mitchell, *Journal A. M. A.*, Sept. 7th, has just written an interesting paper on the literary side of a physician's life: "Roland Rose as a poet."

OBITUARY.

DR. A. E. SANSOM, well-known abroad as an authority on heart disease, and for many years one of the physicians of the London Hospital, and specially skilled in diseases of children, and one of the earliest supporters of the Society for the Study of Diseases of Children, and holding the chair at its first meeting, retired from practice about two years ago owing to failing health, died during the month of May, 1907. We remember Dr. Sansom as a most estimable gentleman and scholarly physician who accompanied us on a tour of Russia.

DR. FREDERICK V. L. BROKAW of St. Louis, Mo., died on September 20, at the age of seventy-three years. He was a native of New Brunswick, N. J., was educated in Peoria, Ill., and received his medical degree from the St. Louis Medical College, and had practised in that city for over fifty years.

Dr. Brokaw in early life was senior colleague interne to the editor of the ALIENIST AND NEUROLOGIST in the Marine Hospital Service. He was a man of energy, ability and probity of character, a good and successful physician and a meritorious man in all the relations of life. We tender to his bereaved family the sympathy of an old friend.

NEUROTHERAPY.

"FOR THE LAST FEW YEARS PHARMACISTS AND PHYSICIANS, working hand in hand, have set themselves to change some of their mutual errors and mistakes of the past. It lies not in the mouth of the physician to reproach the pharmacist nor in the mouth of the pharmacist to reproach the physician. We have erred mutually, we have erred together, and we are determined to redeem ourselves together. The mere trade in patent medicines, in frauds and fakes, the deceits of all kinds, need not concern us. There are crimes outside the ranks of medicine and outside the ranks of pharmacy and we are not starting off on a general reform expedition. There are other organizations and other agencies for that purpose, but the movement to make the drugs—whether the product of the manufacturing houses or the product of the individual pharmacist—which are dispensed over the counter upon our prescriptions, what they purport to be, is one in which you and we have a common interest, and in which our patients have the greatest interest of all. I recognize and you recognize—we must recognize—that in the general progress of science and the general advance of discovery, and the general progress of the arts of manufacturing and preparation of crude pharmaceutics there is abundant room for large manufacturing houses which devote themselves to specialties of various kinds.

For example, how can the individual pharmacist undertake to prepare and supply the great group of animal extracts and serums which now have such a large part in the therapeutics of to-day? And so even with various galenicals, alkaloids and the like. There are many things which the retail pharmacist cannot do as well as that establishment which possesses the proper facilities and

which is thoroughly organized to do well on a large scale what can only be done imperfectly on a small scale. We all recognize that, and the American Medical Association has taken steps, individual physicians have taken steps, to place themselves in proper relation with the great manufacturing houses which are a credit to American Pharmacy and to American business. And yet, after all, there is a place, and there must be a place always for the individual pharmacist—the retail druggist, call him by whatever name you please; for the individual who practices as a scientific man the profession of pharmacy." *From Address of Dr. Solomon Solis-Cohen, Philadelphia, Chairman of Section on Pharmacology and Therapeutics.*

SPINAL ANAESTHESIA IN TETANUS.—Dr. A. E. Russell has reported in the *London Lancet*, on the treatment of tetanus by spinal anaesthesia. A case of tetanus was successfully treated thereby. Sixteen c. c. of cerebral fluid were withdrawn and 3 c. c. of the following solution injected; $1\frac{1}{2}$ grains of beta-cucaine, 1-3 grain of morphine sulphate, and 3 grains of sodium chloride, with sufficient water to make $3\frac{1}{2}$ ozs. This procedure was repeated four times.

HIGH INTENSITY GALVANIC CURRENT IN TRIGEMINAL NEURALGIA.—Francesco Blasi, after having tried the continuous current of ordinary intensity in trigeminal neuralgia, and found it successful in obtaining a cure only in the slighter cases, began the use of a current of high intensity, used with great care to prevent any shock due to interruption of the current. He obtained the best of results in the exceedingly severe cases that are not relieved by any other form of treatment and that render the life of the patient unbearable. The apparatus in use must be capable of giving a current of very high intensity, but of the greatest smoothness. The ordinary machines are useless for this form of treatment. The current must be increased very smoothly and gradually and reduced in the same way. The positive pole is placed over the painful

point or over the entire surface supplied by the trigeminus, and should be a large flat plaque. Several thicknesses of gauze must be placed over the skin so as to prevent electrolytic effects on the skin. The sittings should be from twenty to thirty minutes long when the current is very intense, or of one hour if of less intensity. It has a calming, paralyzing action on the nerves. In the neighborhood of the electrode there develop by secondary action acids which act on the ultimate ramifications of the sensitive nerves, diminishing irritability.—*Annali di Elettricità Medica Terapìa Fisica*, December, 1906, *Medical Record*.

PHARMACOLOGICAL PROPERTIES OF SYNTHETIC SUPRARENIN (ADRENALIN).

(Extract from a Paper read by Dr. Biberfeld, University of Breslau, at the 78th Meeting of Natural Scientists and Physicians in Stuttgart.)

Takamine and Aldrich succeeded simultaneously in isolating from the extract of the adrenals, the active principle therein, *viz.*: adrenalin (or suprarenin); since this time it has been the aim of numerous chemists to unravel the chemical constitution of this most powerful hæmostatic and astringent.

It was to be expected that such a research might lead to a synthesis of suprarenin, and such a synthetic preparation would supply a real want in view of the high price of the natural product and of the impurity of the product isolated from the adrenals.

The best results in this line of research were achieved by F. Stolz in the laboratory of the Höchst Colour-works. He succeeded in clearing up entirely the constitution of suprarenin, the empirical formula of which ($C_9H_9NO_3$) had previously been correctly determined by Aldrich; Stolz found suprarenin to be an o-dioxyphenylethanolmethylamine $(OH)_2C_6H_3CH(OH)(CH_2NHCH_3)$; and he succeeded in preparing this body by synthetic means, obtaining a substance which was identical with natural suprarenin (adrenalin), with the sole difference that the artificial product was optically inactive, whereas natural suprarenin is optically active. Biberfeld examined the suprarenin

thus synthetically prepared and found that its physiological action was in every way identical with that of the natural product. Biberfeld's comparative experiments on animals gave the following results: 1-1,000 mgm. of each preparation introduced intravenously, sufficed to produce in rabbits of moderate size a just noticeable increase of blood pressure. Similarly, both preparations gave rise, in dilution up to 1-500,000, to pupil dilation in an enucleated frog's eye; in several other respects both preparations exhibited identical physiological action. Biberfeld further established that the toxic power of the preparations is identical: it was found to be equal to 4 mgm. when introduced intravenously, 0.1 to 0.12 mgm. when introduced subcutaneously per kilogram body-weight in rabbits. On the strength of these experiments we may be confident that the two preparations, synthetic and natural suprarenin will likewise give identical results when administered clinically.—*Folia Therapeutica*.

ON SEDATIVE AND HYPNOTIC THERAPY.

BY DR. HANS KRIEGER AND DR. R. V. D. VELDEN, UNIVERSITY
MARBURG, MEDICAL CLINIC.

(*Deutsche Medicinische Wochenschrift*, February 7, 1907.)

The writers call attention to the fact that remedies belonging to the class of hypnotics are not all capable of inducing sleep in the sense of the psychological definition of the word although they all possess more or less marked narcotic effects. At the same time, however, circumstances attending the dose and the idiosyncrasy of the patient render possible the occurrence of toxic conditions and by-effects upon the nervous gastro-intestinal and circulatory systems. Although newer hypnotics such as Trional, Neuronal, Isopral, Chloral Hydrate, and Amyl Hydrate are capable of rendering excellent service, yet, in many cases, the substitution of a less powerful and more harmless preparation is much to be desired. Such a preparation has now been discovered by Saam, in the form of Monobromisovalerianyl-urea, which has been placed upon the market under the name of Bromural. This substance has

the formula $(\text{CH}_3)_2=\text{CH} \cdot \text{CHBr} \cdot \text{CONH} \cdot \text{CONH}_2$, and consists of white flakes of feebly bitter taste, soluble in hot water, ether, alcohol, and alkalies, but with difficulty in cold water. The active principle of the preparation is doubtless contained in the isopropyl group present in the Valerianic acid, and its action is further intensified by the binding up of the carboxyl group by means of urea, and by the introduction of a bromine atom into the methylene group which is the near neighbor of the isopropyl group.

Experiments made in the Pharmacological Institute of Heidelberg show Bromural to be a mild hypnotic which produces sleep without, even with very large doses, affecting the circulation. It is also worthy of note that Bromural possesses neither the pure bromine action nor the stimulating one of Valerian.

The writers gave the substance a careful trial in some 100 cases. They found that with an average dose of 10 grains (in certain milder cases only half this amount was given) sleep was induced in from five to twenty-five minutes. Higher doses than these were productive of no increased action on the part of the drug. The indications for Bromural differ from those of other hypnotics by the fact that with it sleep and rest can be procured without after or by-effects in all cases where the failure of the function is not due to nervous disturbance of either peripheral or central origin. The preparation is marketed in tubes of 20 tablets each containing 5 grains.—*Folia Therapeutica*.

EXTENSIVE LUMBAR ANESTHESIA.—It is possible, according to Donitz (*Munchener medicinische Wochenschrift* No. 48, 1906), to extend the anesthesia to the upper part of the chest and even to the arms without danger if tropacocaine is used instead of novocaine or stovaine, which have more effect on the motor roots and thus are likely to cause paralysis of respiration if pushed too high. Tropacocaine has almost no paralytic effect on the motor roots.

The extension upward of the anesthetic effect is due to the flowing upward of the liquid in which the anesthetic is dissolved, and this occurs by flowing of the cerebro-

spinal fluid and not by diffusion. If therefore we wish to extend the effect upward we cause this fluid to flow upward after making the injection. There are three ways of doing this: (1) By changing the position of the body so that the head is lower. The usual dose is 5 centigrammes dissolved in 1 cubic centimeter of water. This solution is isotonic. If this is injected undiluted in the horizontal position there is anesthesia of the perineum only; if in the sitting position with change to horizontal the legs are also affected; if the pelvis is elevated there is enough anesthesia for herniotomy. If the syringe is drawn out and filled with 10 cubic centimeters of cerebrospinal fluid, thus diluting the anesthetic before injecting it, the effects under previous conditions reach to the groin, the umbilicus and the arms respectively. When the effect reaches the chin the pelvis must be lowered. The neck-band and the deep respiration these effects slightly. For anesthesia of the upper part of the body and for labor cases tropacocaine is preferable as it has almost no effect on the motor sphere.

—*Abbreviated abstract from Therapeutic Gazette.*

BIER'S CONGESTION TREATMENT.—The benefit from this method of treatment is shown by Homberger (*Archiv fur klinische Chirurgie*, lxxx, 4) to be due to the increased flow of blood through the dilated veins and not to stasis.

It has been shown experimentally that the temperature of any part of the body as compared to another part is in direct relation to the amount of blood passing through it in a given time. The rise in temperature which accompanies Bier's congestion thus shows that circulation is accelerated, whereas in inflammation it is ordinarily slowed. The slowing can be shown by venesection to exist only in the very center of the inflamed area; the flow is more rapid in the neighboring parts. If there were stasis the temperature of the part would fall. The increased temperature increases combustion—that is, destruction of waste matter—and thus is of benefit. All methods which stimulate the local circulation—*e. g.*, heat and cold—have a similar beneficial effect.—*Therapeutic Gazette.*

LOAF SUGAR IN DIABETES. (*Munchener medicinische Wochenschrift.*)—Oefele says that for some time he has been allowing the more intelligent of his diabetic patients to take a certain amount of loaf sugar, with very good results. In 88 per cent. of the cases it was found that after the regular consumption of 35 g. or over of sugar daily, the amount of glucose in the urine either did not increase or even decrease, while the general condition of the patients was much improved. Not only is the subjective effect on the patient excellent, but as the diabetic organism is deficient in albumins and fats, it is advantageous to have the carbohydrate metabolism increased as much as possible. A diet restricted to albumins and fats involves risk of insufficient oxidation of nitrogen and fats with its danger of oxybutyric acid intoxication, and the possibility of coma, and the administration of sugar does much to avoid these perils. The sugar is best given in the form of sugar water or in coffee, shortly before the muscular exertion, the rule being, no sugar without exercise and no exercise without a preceding sugar feeding. The author believes that the administration of large amounts of sugar under suitable precautions, is advantageous, if not in all cases, in at least 95 per cent of diabetics. Both the actual strength and the feeling of energy are increased by this addition to the dietary.—*Medical Record.*

NEUROSURGERY.

SURGICAL TREATMENT OF PARALYSIS.—The New Albany *Medical Herald* abstracts the following from the *British Medical Journal*. The types of cases discussed by Tubby are those arising from anterior poliomyelitis, spastic paralysis, ischemic paralysis and some traumatic lesions of the nerves. The modern methods of treatment discussed are tendon and muscle transplantation, arthrodesis and nerve anastomosis. Among the cases reported by Tubby are the following: Grafting the extensor proprius pollicis

into the tibialis anticus, and part of the extensor longus digitorum into the internal cuneiform bone for paralytic equino-valgus associated with paralysis of the extensor cruris; insertion of the ilio-tibial band into the patella, which was followed by complete recovery of the power of extension of the leg; grafting the distal facial trunk for traumatic facial paralysis into the hypo-glossal.

PSYCHIATRY.

POTOMANIA IN A CHILD.—(*Gazette des Hospitaux.*) Achard and L. Raymond have been observing a child seven years old and weighing 15 kilogrammes, who drank from seven to eight liters of water a day, and urinated in the same proportion. The urine shows no other anomaly than great dilution. The clinical picture was that of essential polyuria. A number of these cases have been noted in children. The pathogeny of these cases has been widely discussed, but modern authorities consider the polydipsia as a simple effect of the polyuria exclusively due to the necessity of combatting the tendency to dehydration. The child here mentioned was put on a fixed regime and was able to drink a litre and a half of water daily without any trouble. Diuresis diminished in proportion and the weight was not decreased. It is clear that the child drank the original quantity not to satisfy an organic necessity as in true polyuria, nor was it influenced by the desire to drink a liquid having a certain taste as in dipsomania, but it merely acted in obedience to a psychic impulse by which it took any sort of liquid. The case is then an example of true mania for drinking, which is designated by the term potomania.

CLINICAL PSYCHIATRY.

MEETING OF N. Y. HOSPITAL PHYSICIANS FOR THE INSANE.—The first conference between the Pathological Institute and the assistant physicians at the State hospitals

in the eastern part of New York State was held at Middletown hospital last December. Besides the representatives of the Pathological Institute, Medical Inspector Dr. William L. Russell, and Dr. Brooks of Westboro, Mass., there were representatives from the Hudson River, Matteawan, Kings Park, and Central Islip State Hospitals present.

After a brief address of welcome by the superintendent, Dr. Brewster presented several cases in which the diagnosis between manic-depressive insanity and dementia præcox was doubtful. Dr. Pashayan, of Kings Park, read a paper on two cases of chronic mania, and a case of acromegaly was demonstrated.

Dr. Mitchell reviewed the autopsy work of the hospital, and Dr. Meyer presented specimens and drawings from the material of this hospital.

Dr. Meyer's specimens demonstrated that the so-called external saggital marrow is the optic radiation and not an association bundle for the temporal lobe, as has been taught. Another specimen showed an irregular degeneration of the whole cerebral cortex, with hundreds of minute softenings due to advanced arteriosclerosis, with a resulting cauliflower-like irregularity of the surface. Traumatic defects in the cortex were also shown. In the latter the most superficial layer of the cortex is most affected, and the gap bridged only by pia mater, while in the arteriosclerotic degeneration the more superficial layer made up of neuroglia fibers is preserved.

The subject of central neuritis was reviewed, and Dr. Woodman presented a paper on the symptomatology of hysterical insanities. Dr. Kirby made a partial report of the cases analyzed in the wards of the Pathological Institute at Ward's Island, and Dr. Barrus presented three interesting cases of undiagnosed depressions. Very interesting remarks relative to hospital work were made by Medical Inspector Dr. William L. Russell.

EMOTIONAL CONTROL OF JAPANESE WOMEN.—The daughters of Japan have not lost their old Samurai spirit, which is the spirit of Japan, and with the stoicism and

the courage and the patriotism which is that spirit they are cultivating as much of the occidentalism as seems to them good.

It is considered very rude, and very vulgar, to show one's grief; according to the sternly grand idea of Japanese courtesy one owes it to one's fellows to show him only a happy, smiling face.

A Japanese woman whose little son, an only child, had recently died, called on an errand at the home of an American family living in Tokio. The American woman asked for the health of the boy, and the mother answered with a smile that he had died several days before. A number of questions followed concerning his sickness and the time of his death, to all of which the mother answered cheerfully and smilingly. After a few apparently happy remarks on different subjects she departed to her home. The American woman was angry and horrified at what she deemed the woman's callousness and lack of maternal feeling. The husband knew more of Japanese character and made two observations: that the handkerchief the woman carried had been torn into tiny bits during the conversation and that as she left her lower lip was bleeding.—Marian Bonsall, *Japanese Wives and Mothers*, in *The Housekeeper*.

CLINICAL NEUROLOGY.

THE TARSOPLHALANGEAL REFLEX.—Some years ago both Bechterew and Mendel called attention to a foot reflex which they averred would be found of use in distinguishing between organic and functional disease of the nervous system, but the sign does not seem to have attracted a great deal of attention as yet. It consists in the fact that when the dorsal surface of the foot is tapped with a percussion hammer over the third cuneiform or cuboid bone, dorsal extension of the second to the fifth toes is produced in normal persons, and in cases of functional nervous disease, whereas if organic lesions of the nervous

system are present plantar flexion of the toes is caused. Recently two communications on this subject have appeared, one by Lissmann in the *Munchener medizinische Wochenschrift*, May 21, 1907, and the other by Meyer in the *Berliner klinische Wochenschrift*, August 26, 1907. One of the chief points of interest in connection with the reflex has been its relation to the Babinski reflex, and the former author states that he was not able in any case to elicit a positive Bechterew-Mendel reflex when the Babinski was negative. Meyer, however, reports ten cases in which the former reflex was constantly present, but the Babinski sign was either entirely absent or appeared only after the lapse of considerable time. It therefore appears that cases occur in which the Bechterew-Mendel reflex is present earlier than the Babinski, and that it accordingly has added diagnostic value in differentiating between organic and functional diseases, since it is a very early symptom of the former condition and forms a precursor of the Babinski sign, which is now so universally looked for.—*N. Y. Medical Record Ed.*

RARE AFFECTION OF THE PYRAMIDAL TRACT WITH SPASTIC SPINAL PARALYSIS AND BULBAR SYMPTOMS.—By Dr. Kinicki Naka (*Archiv. f. Psychiatrie u. Nervenkrankheiten*, Vol. 42, H. 1, 1907). Spastic spinal paralysis, as originally described by Erb and Charcot, consists in a gradually developing spastic paralysis of the lower, later on the upper extremities, without atrophy of the muscles, and without changes in the electric irritability. This clinical picture has been found to correspond to various anatomical findings, so that it is doubtful whether spastic spinal paralysis should be interpreted as an independent disease, or as a symptom complex.

The patient observed by the author was a woman, 68 years of age, whose illness began with pain in the left knee, after a fall; followed by pain in the other extremities also. At the same time, progressive paralysis developed in the legs, which was combined later with paresis of the arms. Finally, disturbances of speech and of swal-

lowing also appeared. The paralysis was of a spastic character. There were no atrophy, sensory disturbances, changes in the electric irritability, fibrillary twitchings, etc., and disturbances of the vesical and rectal function were likewise absent.

In the further course, the patient had several attacks of causeless laughter or crying, and a few days before death, there were several temporary attacks of dyspnea. She died rather suddenly, after Cheyne-Stokes breathing. The anatomical examination served to demonstrate an existing degeneration of the cortico-spinal neuron of the motor tract. The case was characterized by the appearance of bulbar symptoms in the course of spastic spinal paralysis. There are only a few cases on record in which the pure clinical symptoms of spastic paralysis had been observed, and in which a change only of the pyramidal tract could be demonstrated anatomically.—*Collins and Robbins excerpt Post Grad.*

THREE CASES OF LINGUAL NEURALGIA.—By Dr. Hoflmayr (*Muench. med. Wochenschrift*, Dec. 18, 1906). Descriptions of disease affecting the nerves of the tongue almost exclusively deal with functional disturbances in the area supplied by the glossopharyngeal, the facial, and the hypoglossus; whereas isolated neuralgia of the lingual nerve is usually considered as uncommon. The three observations published by the author are accordingly noteworthy and interesting. The patients were three men of 68, 44 and 40 years of age, respectively, all of whom presented neurasthenic symptoms, with habitual constipation. The neuralgia in these cases was characterized by pain strictly limited to the region innervated by the lingual nerve, the the two principal nerves of the tongue (glossopharyngeal, nerve of special sense, and hypoglossus, motor-nerve) being perfectly healthy. The author was enabled to determine, moreover, that the chorda tympani, which governs the sensation of taste in the anterior third of the tongue, was not involved in the pathological process. There was no local inflammation, and the corresponding

lymphatic ganglia were not swollen and enlarged, as is invariably the case in the existence of some lingual or buccal affection. The only plausible reason to which the condition could be referred consisted in the habitual constipation and resulting auto intoxication. As a matter of fact, the origin of certain hemicranias shows these factors to be capable of acting upon the cranial nerves, probably through the sympathetic. By accurately regulating their intestinal functions the author succeeded in progressively relieving the lingual neuralgia of these three patients. In the first two cases, the patients were instructed to rinse the mouth with camomile tea and a solution of potassium permanganate, as a local placebo.—*Collins and Robbins excerpt Post Grad.*

NEUROPATHOLOGY.

BRAIN TUMOR.—J. Grinker, Chicago, (*Journal A. M. A.*), reports a case of brain tumor, locally diagnosed ante mortem as occupying the subcortical region under the lower two-thirds of the anterior central convolution of the left side, but not involving the base of the brain. The autopsy revealed a large subcortical glioma involving the region indicated and not clearly defined from the surrounding brain tissue. The author remarks on the absence of local cortical symptoms in the case, the probable limitation of the motor area to the region anterior to the Rolandic fissure in man, the impossibility of making an exact anatomic diagnosis of the nature of the growth and the general inoperability of glioma because of its tendency to infiltrate and its usual deep situation in the white substance of the hemisphere.—*Medical Fortnight.*

THE MICROBE OF POLIOMYELITIS.—By Dr. Wethloff (*Norsk. Mag. jr. Laegevidenskaben*, 3, 1906).

With reference to the publications of Geirsvold and others, concerning microbes found in poliomyelitis, the author points out that as far back as 1901 he obtained a micrococcus in pure culture from the cerebrospinal fluid of

a patient having poliomyelitis. This organism closely resembled that found by Geirsvold and Lie. He describes the manifold transitions between individual micro-organisms, according to the culture medium, and expresses the opinion that the agents of poliomyelitis must be more closely related to the staphylococcus than the streptococcus, being most directly akin to the micrococcus tetragenus of Gaffky.
—*Collins and Robbins excerpt Post Grad.*

REVIEWS, BOOK NOTICES, REPRINTS, ETC.

DICTIONNAIRE DE MEDICINE ET DE THERAPEUTIQUE MEDICALE ET CHIRURGICALE, Comprenant le Résumé de Toute la Médecine et de Toute la Chirurgie. Par les Docteurs E. Bouchut, Médecin de l'Hôpital des Enfants Malades, Professeur agrégé à la Faculté de Médecine de Paris, et Armand Després, Chirurgien de l'Hôpital de la Charité; Professor agrégé à la Faculté de Médecine de Paris, Septième Edition, Revue et Mise au Courant de la Science, par les Drs. G. Marion, Professor agrégé a la Faculté de Médecine de Paris; Chirurgien des Hopitaux, et F. Bouchut. Paris Felix Alcan, 1907.

In the seventh edition of this encyclopedia of medical science, the revisers have brought the subject matter thoroughly up to date, the revision being most carefully done in the articles relating to bacteriology, opotherapy, orrhoterapy, hygiene, and electrotherapy. In the surgical articles the newest operative measures have been fully described, and many new instruments and prosthetic appliances have been pictured. The therapeutic indications for each disease are given with great care and other subjects fully treated are those included under the heads of obstetrics, ophthalmology, dentistry, materia medica, and mineral waters. To the reader of French the book will prove very useful as a work of ready reference, and as a dictionary to define various French terms occasionally employed in English medical literature.

L'AIME ET LE SYSTEME NERVEUX. Hygiene et Pathologie. Par Auguste Forel, Ancien Professeur de Psychiatrie a l'Université de Zurich. Paris: G. Steinheil, 1906.

This is a semipopular treatise on the mind and nervous system, with special reference to the prophylaxis of psychical disorders. Professor Forel's writings on this theme have already had a wide circle of readers. His recent book, particularly "*La Question Sexuelle, Exposée aux Adultes Cultivés*," has attracted wide attention, and is one of the best examples of semipopular medical writing "for intelligent adults." Beginning with a sketch of the elements of psychology, the general anatomical facts pertaining to the brain, the cord and the nerves, Forel leads the reader by very easy gradations into the mysteries of mental pathology. He dwells upon the causes of nervous and mental disease, and thus brings the reader to the rules for their prevention. Here he speaks of every phase of life, school life, family life, etc., and preaches the doctrine of moderation in living, in work, and in pleasure, as a mode of preventing insanity and nervous affections. He closes with a chapter on the sociological or public aspect of the hygiene of the nervous system.

The book should be translated into English. It would make most interesting reading for our cultured patients, and also would bring its useful teachings more generally before the American medical profession.

INTERNAL SECRETIONS AND THE PRINCIPLES OF MEDICINE, by Charles E. deM. Sajous, M. D., Fellow of the College of Physicians, of Philadelphia. Volume second with twenty-five illustrations. F. A. Davis Company, Publishers, Philadelphia.

Dr. Sajous has found a place in the human economy for the ductless glands and lifted them up as a searchlight to illumine the physiology of vital functions. He locates them somewhat as military art places its highest commanders in the fields of strategy and manœuvre, out of ordinary range of vision but still silently commanding movement.

The pituitary as a governing center of vital function, the discussion of the innervation of the adrenal system, illustrations, and the neurone as an organ are especially

interesting reading if any one chapter in this entirely interesting book may be said to be more interesting than another, and the introduction itself is particularly illuminating in its scope

Sajous' adrenals, supplying a secretion which, sent through the blood channels to the lungs and there taking in oxygen, promoting pulmonary respiration and building the hemoglobin secretion, his haemic "oxidase," an adrenal carrying oxygen to all the tissues, this adrenal secretion distributed to all the cells, supplying and sustaining them, his thyroid gland secretions, as the source of the opsonins, the scavenger and vitalizing functions of the leucocytes, the autoantitoxins and their adrenal source under oxydation, the pancreatic trypsin and the "thyroidose" (opsonin) and the pituitary body or protective somatic brain, the brain of the spinal system as Sajous regards it.

These facts and deductions, the conception of the anterior pituitary body, as a sensitive organ, like the olfactory area of the nasal cavity described by the zoologists as a blood testing organ; the physical relation he maintains the rest of the organism, through neural connection; "adrenoxidase" increasing general metabolism and leucocytosis, all and more than we have here noted, furnish a remarkable neuropsychic pabulum for professional mental digestion and scientific and therapeutic thought. This book brings us nearer than ever before to the psychological, philosophical and anatomical rationale of the *vis medicatrix naturae*, handed down to us from the earlier fathers in physic.

While we do not accept all the conclusions of this book as final, we cordially commend it as the best thought feeder and stimulant of our day in philosophical medicine.

It will arouse the torpid brain and excite the drones to action, who may muster energy enough to read it. Its revelations prove the truth of what our wisest fathers said of the capacity of the human organism, rightly cared for, interrogated and helped by judicious medication to throw off its encumbering diseases, shames the therapeutic Nihilists, made so by lack of adequate study of remedial

resource and nature's self cure capacity, and reprimands the hopeless pessimistic non-theapeutists living anew in the dark ages of remedial resource, by showing how ready to help the inherent forces of normal organism are when seconded by wise medical ministration.

THE PROCEEDINGS of the American Medico-Psychological Association at the sixty-second annual meeting held in Boston, June 12-15, 1906, is a creditable presentation of interesting and instructive proceedings. The papers and discussions are all valuable to the psychiatrist, alienist and psychologist, the most elaborate and instructively illustrative contribution being the article by Dr. Solomon C. Fuller, on the study of the neurofibrils in dementia paralytica, dementia senilis, chronic alcoholism, cerebral lues and microcephalic idiocy.

The hospital diagrams with Dr. Geo. A. Smith's paper will especially interest those engaged in or contemplating hospital construction. Neurologists will be attracted to the paper of Dr. C. A. Drew. Langdon's paper and plates illustrative of paresis will please the neuropathologist and pathologist.

These transactions contain no paper devoid of merit, but one is pained to see the unusually large number of obituaries recorded therein.

THE DIAGNOSIS OF THE NERVOUS SYSTEM. A Manual for Students and Practitioners by Christian A. Herter, M. D., Physician to the Class of Nervous Diseases, Presbyterian Hospital Dispensary. G. P. Putnam's Sons, New York and London. The Knickerbocker Press.

This volume is designed to aid the student and general practitioner in the recognition of the commoner forms of nervous disease.

The arrangement that has been followed in the presentation of facts is somewhat unusual and requires notice. The author presents those facts regarding the motor and sensory paths that are of practical importance in diagnosis.

The chapter on symptomatology contains a description of the most important symptoms of nervous disease, and in most cases, the chief facts regarding their diagnostic significance and pathology. In the chapter on localization many of the facts given under symptomatology have been restated for greater emphasis and better fixation in the mind of the student.

In the fourth chapter, on the diagnosis of the lesion, an attempt is made, first to give the main facts (from the standpoint of diagnosis) in the pathology of the different classes of lesions, and secondly, to show the manner of employing the indications that are derived from the onset, from etiology, and from the position of the lesion.

The sixth chapter presents the chief points of distinction between different forms of functional disease and the organic conditions with which they may be confounded, and the author makes a rather sharp separation between traumatic neurosis and hysteria. A short chapter on the examination of the patient will hardly be questioned.

The illustrations of diagnosis in the eighth chapter are designed to aid the student in the application of the methods of diagnosis to actual cases of disease.

This book is one of the best of Putnam's Sons Students Aid Series, and as such we cordially commend it to students and physicians.

THE ASYLUM NEWS, the Journal of the Asylum Workers Association, numbers ten and eleven of volume eleven, are on our review table, and this is the first time any number of this interesting philanthropic periodical has come under our notice. It is ably conducted by that experienced and capable alienist, Dr. G. E. Shuttleworth. Besides giving detail records of interest to all concerned in the care of the insane in the capacity of nursing attendants, its general tenor is furthermore psychiatric from a medical standpoint. The two numbers before us contain a several column reference to the work of the late Amsterdam Congress of Psychiatry and the care of the insane,

the continuation of Dr. James Niccolls' excellent papers on mental nursing, etc.

A periodical of similar scope would be of service to the hospital for the insane in this country. It is ably conducted and filled with special and detailed asylum news. The editor is pleased to have met Dr. Shuttleworth and regrets that ill health and bad weather compelled him to keep indoors and away from some of the meetings of the Amsterdam Congress during the bad weather that prevailed a part of the time there.

PRELIMINARY MEDICAL EDUCATION. *Science* for October eleventh, among its usually good table of contents, contains an article on preliminary medical education, by J. H. Long, based on a report to the Council on Medical Education of the American Medical Association, presented April 29th, 1907, which will interest faculties of medical colleges, prospective medical students, physicians and the intelligent public generally, interested in the sanitary welfare of the people through a thoroughly trained and observantly capable medical profession.

THE NERVOUS SYSTEM OF VERTEBRATES, by J. B. Johnson, Ph. D., is again on our table, giving an account of the nervous system as a whole and tracing its phylogenetic history and showing thereby "the factors which have determined the course" of its evolution. A commendatory notice of this valuable book, indispensable to the student of neurology, psychology and animal anatomy, physiology and incidental evolution, appeared Vol. 27, No. 4, p. 508 of this journal. Blakiston's Sons and Co., Philadelphia, are the publishers.

THE NATURE AND TREATMENT OF PTERYGIA, by John O. McReynolds, M. S., M. D. Read at the fifty-third annual meeting of the American Medical Assn., in the section on Ophthalmology and approved for publication by the executive committee: Drs. Frank Allport, H. V. Wurdemann and J. A. Lippincott.

A valuable contribution from an eminently competent source of practical experience by probably the best among the many ophthalmic surgeons of the southern United States and peerless among the ophthalmologists of America.

PATON, in his *Psychiatry*, says that hysteria has so many mental anomalies associated with it as to justify its inclusion among the psychoses. Janet, in a recent book, "The Major Symptoms of Hysteria," distinguishes between what was formerly termed the medical aspect of the group of symptoms called hysteria and what is now called the psychological period. He still believes hysteria to be a form of mental disintegration tending toward a complete disassociation of personality, but some views he formerly held as to volition, mental abulias, stigmata, have either been modified or abandoned. He has made a great contribution to the literature of the psychoses.—*Cin. Lan. Clin.*

DISEASES OF THE RECTUM, THEIR CONSEQUENCES AND NON-SURGICAL TREATMENT,—by W. C. Brinkerhoff, M. D. Published by Orban Publishing Co., E. Van Buren St., Chicago, Ill., 1907. Price, \$2.00.

This book appears to have been written for a personal commercial self-advertising purpose, and as such contains little to call for commendation to our readers. Among the remedies used by the author, besides his own patented needle, is his hemorrhoidal compound, composed of ingredients prepared under a thermometrical test.

INTERNATIONAL CONGRESS, Psychiatrie, Neurologie, Psychologie, Krankzinngenverpleging. Sept. 1907.

Most excellent entertainments were provided, consisting of a social gathering at Keizersgracht, reception by the Student's Club, Heiligenweg, performance at the theatre Leidsche Plein.

The theatre or opera entertainment was one of the most appropriate and enjoyable ever given by any similar congress to its guests, consisting of a play introducing old Netherland songs, costumes and customs, and tableaux

vivant, portraying medical subjects of interest as exhibited in paintings of old masters. These included *The Charlatan* by Jan Steen, *The Lesson in Anatomy* by Rembrandt, *The Dropsical Lady* by Gerard Dou, *The Lady Patient* by Jan Steen and *The Family Scene* by Cornelius Troost and themes by painters of the sixteenth century.

ADVANCING ST. LOUIS ART VALUE IN DEVELOPING A CITY.—This is the title of an important brochure emanating from the St. Louis Museum of Fine Arts, and including "A plan to extend St. Louis Art Museum and enlarge its work in its new home in the Exposition grounds in Forest Park."

Art museums do more than develop artistic tastes among peoples. They enlarge the extent of the peoples' needs as well as artistic tastes.

The development of art increases the means of mental and physical occupation among a people and consequently enlarges their happiness. Artistic tastes pass from the luxurious to the necessitous in indulgence, and these demand and cause the expenditure of means by the wealthy and well-to-do and make new fields for more artists and gilders and framers, and appropriate household settings for productions of artistic taste and skill, and thus expand and extend the demand upon rightful bread procuring handicrafts among men. Museums are thus psychical and physical benefactions to mankind.

PUBLIC HEALTH Papers and Reports, Vol. xxxii, parts one and two, presented at the thirty-fourth annual meeting of the American Public Health Association, at the City of Mexico, Mexico, December 3, 4, 5, 6, 7, 1906. Fred Heer, Publisher, Columbus, Ohio, 1907.

This association continues its good work. Its impress has markedly been felt for the sanitary welfare of the people.

The pure food law is the outcome of this association's persistent recommendations and efforts, and the growing sanitary knowledge and watchfulness of communities is the

result, in a great measure, of this body's great work.

For thirty-four years this organized body has offered line upon line and precept upon precept based on medical research till the people have learned that too many have needlessly sickened and died and are now demanding healthful regulation of railway and street cars, city and state governments. They have learned that the mosquito, the fly and the rat must go and with them the ignorant, rat-like, grafting politician, who feeds himself at public expense and destroys the premises that maintain him.

STATE OF NEW YORK. State Commission in Lunacy, Eighteenth Annual Report, Oct. 1905 to Oct. 1906.

Two charts especially, among the many other valuable features of information, characterize the elaborate work before us. One showing the proportion of foreign-born insane in Ireland, Germany, Russia, Italy, Austria, England, Scotland, Wales, etc., etc., marked as sections of a circle, the other showing the topography of insanity in colors on a map of the state.

All of the charts (8) are interesting as showing the relations of locations, immigration, nativity, causes, occupation, etc. to insanity, and the mortality of this disease of the brain and mind. The maps of the state hospital districts will also interest our New York readers.

ANATOMY OF THE BRAIN AND SPINAL CORD, with special reference to the mechanism and function. By Harris E. Santee, M. D., Ph. D., Professor of anatomy in the College of Physicians and Surgeons, Medical Department University of Illinois, and in the Jenner Medical College, Chicago. Fourth edition, enlarged and revised. With 128 illustrations, of which 33 are in colors. Octavo; 453 pages. Cloth, \$4.00 net. P. Blakiston's Son & Co., 1012 Walnut St., Philadelphia, are the publishers.

This is an excellently arranged book for the student and practitioner of medicine or surgery seeking a well

illustrated volume not too voluminous for ready reference.

The illustrations are accurate and forceful in the communication of right anatomical conception. One diagrammatic illustration (No. 15) on page thirty one, taken from Morris' Anatomy, ought however, to have been more prominently marked schematic, and the printer has put some reference dots erroneously connecting the prosencephalon with the posterior cerebral lobe only, which is misleading to the novice in the anatomy of the neuraxis, because the student is not supposed to know that the anterior part of the embryonic cerebral center develops into the entire cerebral hemisphere including the occipital lobe, to which the dots only point, including also the olfactory lobes and striate bodies as well as the anterior divisions of the hemisphere to which the dots do not point.

The book is tersely and clearly written and commends itself to the reader for its force and brevity of description. The author and publisher and binder have done their work well.

A BRIEF SKETCH of one of Baltimore's greatest men, Horatio Gates Jameson, M. D. His most valuable contribution to surgery: The Occlusion of Arteries by the Buried Animal Ligature. From the Transactions of the Southern Surgical and Gynecological Association, 1906, by Henry O. Marcy, A. M., M. D., LL. D., Boston.

A well-merited tribute from a source of merit.

"THE HOSPITAL" has changed its name to the *Modern Medical Journal*, since last April, and has a good foreign professional support. We think familiarity with its merits will make it equally popular with the American medical profession.

The new series includes every section of hospital work. A number of representative members of the medical profession, including some of the most active workers and best writers, constitute the staff. Methods of treatment and practice in Great Britain, Europe and the United

States and a Clinical Lecture by some leading member of the medical profession each week will be one of its chief features. Address "The Hospital" Building, 28 and 29 Southampton Street, Strand, London, W. C.

A PLEA FOR THE MORE ENERGETIC TREATMENT OF THE INSANE. By Charles Williams, L. R. C. P., L. R. C. S., L. S. A., formerly Resident Assistant Medical Officer, Heigham Hall Asylum, Junior Medical Officer, Shaftesbury House Asylum, &c. Author of "A New Method of Treating the Insane;" "Modern Pessimism: its Cause and Cure;" "Holywell and its Miracles;" "The Truth about Spiritualism;" "A Short Essay on Insanity," etc. Published in London by Henry J. Glaisher, 57 Wigmore Street, Cavendish Square, W. The price is one and sixpence net.

This is an interesting brochure from an instructive source of right clinical experience with the insane, as notice of the authors insane hospital relations and previous contributions will show.

The author justly believes in a judiciously adapted therapy for mental aberration addressed to whatever may be found amiss in the patient's organism and cites convincing instances of recovery.

The insane are too often left exclusively to the resources of changed environment and their own depressed *vis medicatrix*. The apathy and indifference to their personal comfort passed with Chiarugi, the Tukes and our own Benjamin Rush, who a century ago employed medical treatment and recommended and established separate hospital provision for the therapeutic management with minimized restraint for the insane.

Our author who quotes freely from Clouston speaks of "dementia once thoroughly established as dead;" now Clouston does not so regard all dementias and gives us proofs of many recoveries. There is undoubtedly a functional as well as organic dementia, dementia of cerebri-asthenia in the aged especially and in the psychasthenic and neurasthenic which may be improved to normal recovery

in some instances and to normal senility in others. Terminal organic dementia of course is hopeless.

The author's advice to persevere with therapeutics is worthy of being diligently followed in all cases of acute insane and we believe also in chronic cases, not excepting dementia senilis. The author advocates the surgical treatment of certain psychophysical conditions whenever found in the insane in connection with delusion.

ANALES DEL CUARTO CONGRESO MEDICO PAN-AMERICANO, Tomo Secundo, Panama, 1906, has come to us but the first volume has not been received.

When the first volume comes to our sanctum, if it ever does, we shall take pleasure in giving these annals further notice. The second volume contains mostly North American papers, some of them of special interest, among them Psycho-therapeutics, by Edes, of Boston; Panama as it Relates to Homicide, by Putnam, of Buffalo; Paranoia as seen in Criminals, by Putnam and A. E. Macdonald, of New York; Pseudoacousia, or "Pseudokousma" as the paper is captioned by the author, Dr. Frank H. Koyle, of Hornellsville, N. Y.; Observations on Dementia Præcox, by Brower, of Chicago; Some Gynecological Superstitions, by Lucy Waite, of Chicago; The Care and Treatment of Epilepsy, by Charles H. Hughes, of St. Louis; The Bubonic Plague in Mazatlan and Mexico City, by Liciaga, of Mexico; Special Reflex Accidents after the Cataract Extraction, by P. de Obarrio.

THE INTEGRATIVE ACTION OF THE NERVOUS SYSTEM, by Charles S. Sherrington, D. Sc., M. D., Hon. LL. D. Tor., F. R. S., Holt Professor of Physiology in the University of Liverpool, Honorary member of the American Physiological Society, etc. With illustrations. New York, Charles Scribner's Sons.

In the year 1883 a legacy of \$80,000 was left to Yale College by Mrs Hepsa Ely Silliman as the financial foundation for the support and maintenance of an annual course of lectures illustrative of the presence and providence,

wisdom and goodness of God, as manifested in the natural and moral world, excluding dogmatic or polemic theology and providing that the subjects should be selected rather from the domains of natural science and history, giving special prominence to astronomy, chemistry, biology, geology and anatomy. These lectures are to constitute volumes of a series, memorial of Mrs. Silliman.

The trustees of this bequest have acted wisely in making this great contribution to biological science by Sherrington on the integrative action of the nervous system, the second in the course of lectures established.

A part of this magnificently planned library in memoriam of the broad and liberal minded donor for which the student of vital phenomena, physical organism and of natural law, even in the spiritual world, in so far as it may be seen "by sight of science" up to date, must ever be grateful.

The study and relations of reflex phenomena, so comprehensively encompassed by the learned, painstaking author, to vital processes and vital conservation are in this aggregate of ten lectures invested with a wider interest than ever before shown to physiologist or physician.

The author, while noting the remarkable fact established for anthropoid apes by Fritsch, Hitzig, Ferrier, and confirmed in man by the latter and by Bartholow and his followers, that electrical stimuli, applied to the organ of mentality, yields with regularity certain localized movements from certain restricted areas of its surface, maintains that the cerebral fissures are not functional boundaries. He maintains also that the recovery of function is not due to the opposite hemisphere taking on supplemental work. The author discusses the always interesting phenomena of inhibition not only as elicited from the cortex but as displayed sub-cortically.

The preponderant representation in the motor cortex of the same movements as are preponderantly elicitable as local reflexes from the cord, and together with the discussion of "decerebrate rigidity," tetanus and toxin reversal of

the normal direction of preponderance, decerebrate and hemiplegic rigidity, Hughlings Jackson's cooperative antagonism, the relation of the cortex to "receptor organs," and many more subjects are discussed in lecture eighth alone.

It is difficult to say which of the ten valuable chapters of this valuable book are the most interesting. Perhaps lecture IV on the interaction between the reflexes, the simultaneous combination of compound reflexes and successive combinations as discussed in lectures V and VI, reflexes as adapted reactions, chapter VII and lecture IX on the physiological position and dominance of the brain will most enchain the attention of the neurological and psychocerebral clinician and cerebro-psychologist who reads *The Alienist and Neurologist*.

The author concludes that the cerebrum, and especially the cerebral cortex, is the latest and highest expression of nervous mechanism—the organ of and for the adaptation of nervous reaction.

Regretting that more space is not at command for portrayal of the many meritorious features of this best book of the day upon the important subject upon which it treats, we can only conclude this cursory survey with most cordial commendation of the author and his timely, helpful treatise.

The publishers are Scribner & Sons, New York, and the price is \$3.50.

Appendicostomy, James P. Tuttle, M. D., New York.

Medico-Legal. By E. S. McKee, M. D., Cincinnati.

Is Hamlet Insane? A paper read before the Shakespeare Club at Kansas City, Mo., January 9th, 1895. By Judge H. C. McDougal, Kansas City, Mo.

A Decade in Missouri Politics, 1860 to 1870, from a Republican Viewpoint, Address of Judge H. C. McDougal, of Kansas City, Delivered Before the State Historical

Society of Missouri, at Columbia, March 8th, 1904.

Hysteria. By Robert S. Carroll, M. D., Asheville, N. C.

Ambulatory Automatism. President's Address Before the Thirty-Third Annual Meeting of the American Neurological Association, held at Washington, May 7, 1907. By Hugh T. Patrick, M. D., Clinical Professor of Nervous and Mental Diseases, Northwestern University Medical School; Professor of Nervous and Mental Diseases, Chicago Polyclinic, Chicago.

The Contamination of the Air of Our Cities with Sulphur Dioxid, the Cause of Respiratory Disease. By Theodore W. Schæfer, M. D., Formerly Professor of Chemistry, University Medical College, Kansas City Veterinary College, etc., Kansas City, Mo.

The Treatment of Traumatic Rupture of the Kidney with Report of Two Cases Observed Within Eighteen Hours. Edmund A. Babler, M. D., Associate Surgeon, St. Louis Skin and Cancer Hospital, St. Louis.

The Prevention of Venereal Diseases. By Fred C. Valentine, M. D., and Terry M. Townsend, M. D., New York.

The Venereal Peril in its Relation to the State. By Ferd C. Valentine, M. D., New York City.

Education in Sexual Subjects. Part of a Discussion Before the American Society of Sanitary and Moral Prophylaxis, October 12, 1905. By Ferdinand C. Valentine, M. D., New York.

The Treatment of Gonorrhœal Epididymitis. By Julius J. Valentine, M. D., New York.

Massage of the Prostate and Stripping the Seminal Vesicles. Read before the Manhattan Clinical Society,

March 15, 1907. By Ferd C. Valentine, M. D., and Terry M. Townsend, M. D., New York.

Urethral Hemorrhage. Presented Before the American Urological Association (Second Section,) December 12, 1906. By Ferd. C. Valentine, M. D., and Terry M. Townsend, M. D., New York.

The Emergency Dilatation of Urethral Stricture. By Ferd. C. Valentine, M. D., and Terry M. Townsend, M. D., New York.

Report of the Department of Sanitation of the Isthmian Canal Commission for the Month of July, 1907. W. C. Gorgas, Assistant Surgeon-General, U. S. Army, Chief Sanitary Officer.

The Status Medicus: A Statement and a Proposition. By James Krauss, M. D., Specialist of Genito-Urinary Medicine and Surgery, 419 Boylston Street, Boston, Mass.

The Eighty-Third Annual Report of the Officers of the Hartford Retreat at Hartford, Conn.

Thirty-First Annual Report of the Managers and Officers of the New Jersey State Hospital at Morris Plains, for the Year Ending October 31st, 1906.

Sodium Glycocholate Mass (Comp.) in Diseases of the Liver. By H. Richardson, M. D., Late Pathologist of Mt. Hope Retreat, and Demonstrator of Physiological Chemistry at the University of Maryland, Baltimore.

Opsonins and the Use of Therapeutic Vaccines in Treating General Paralysis of the Insane. Read Before the American Medico-Psychological Association, Washington, D. C., May 9, 1907. John D. O'Brien, M. D., Pathologist and Assistant Physician, Massillon State Hospital, Massillon, Ohio.

The Therapeutics of Bright's Disease Based upon its Etiology. By William Henry Porter, M. D., Professor of Pathology and General Medicine at the New York Post-Graduate Medical School and Hospital; Attending Physician to the Post-Graduate Hospital, etc.

Centralblatt für Nervenheilkunde und Psychiatrie. Redaktion: Professor Dr. Gaupp in Tübingen. Verlag von Vogel & Kreienbrink, Berlin W. 30 und Leipzig.

Die Therapie der Gegenwart herausgegeben von Professor Dr. G. Klemperer, Berlin.

Archives de Médecine des Enfants, Paris, France.

Centralblatt für die Grenzgebiete der Medizin und Chirurgie. Herausgegeben von Dr. Herman Schlesinger, Professor an der Universität Wien. Verlag von Gustav Fischer in Jena.

Monatsschrift für Geburtshülfe und Gynäkologie Herausgegeben von A. Martin in Greifswald und A. v. Rosthorn in Heidelberg.

La Genèse du Sexe, par Louise G. Robinovitch. *Communication aux Congrès de Lisbonne et de Turin.*—Brochure 15 p. éditée par le *Journal of Mental pathology*, New-York, 1906.)

Doctrine de l'aphasie, conception nouvelle, par Bernheim (de Nancy,) 1 br. 28 pages, Doin 1907.

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A given quantity of milk will yield about three-fourths of its volume of whey.

Put a quantity of cold milk, depending upon the amount of whey required, into a suitable vessel—a saucepan or other small pan answers the purpose well—and add to it liquid rennet or essence of pepsin in the proportion of two teaspoonfuls of liquid rennet or essence of pepsin to one pint of milk. Mix by stirring gently with a spoon and then warm to about 100° F., not over 104° F., and keep at this temperature until coagulation occurs. This is easily done by setting milk in a pan or vessel of water, keeping the water at a temperature of about 105° F. After coagulation has taken place, break the curd up into small pieces with a fork, and keep the mixture warm for a little while longer until the curds have shrunk somewhat, as the yield of whey is thereby increased appreciably and the straining facilitated. Prepare a strainer by laying one or two thicknesses of muslin

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THE OLD LUNATIC ROOM of the Historical Medical Pharmaceutical Museum in the Municipal Museum of Amsterdam, with its relects of the old time form of mechanical restraint for the insane which lead to cruel neglect and sometimes painful punishment, especially in the prisons and monasteries, when the insane were regarded as less diseased than diabolically possessed, the painting of the old Holland Lunatic Asylum with other paintings, *tableaux et gravures*, together with the excellent description of this historical and scientific *Musée Historique*. Medico-pharmaceutic was also a source of instruction and attraction to the members of this distinguished Congress.

THE THOUGHTFUL PROVISION for guests made by Committee of Arrangements was excellent, the visitors to the Congress being furnished with a large and separate sheet giving names, locations and prices.

THE STRUGGLE OF THE AGES is the emancipation of truth from authority, says Dr. Geo. F. Butler of Chicago, applying it to medicine, in his address to the Mississippi Valley Medical Association at Columbus, Ohio, last October, in which he makes honorable reference to Josiah Bartlett, Matthew Thornton, Lyman Hall, Benjamin Rush, Leonard Wood and Dr. Tilton, early Prest. of the State of Delaware, among the medical men of influence on human progress. The address is excellent reading in Butler's attractive style.

DANGER TO DOCTORS.—It seems that the greatest danger the doctor has to contend with is not contagious disease or stress of weather or the night highwayman, but that it is woman, designing, malicious women. Dr. E. L. Emmons was called to visit a patient whom he had never visited before. He found her in a boarding house complaining of the symptoms of a hard cold, for which he prescribed. He did not hear from her again till a week or so later, when he read in the papers that the woman had accused him of procuring an abortion on her. She was a janitress and was found by another physician suffering

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from sepsis due to a blundering attempt to procure an abortion. Another physician was called in and the patient removed to the hospital. The prosecutor's office was notified and the assistant prosecutor and a stenographer hastened to the bedside to take the ante-mortem statement. The priest having administered the last sacrament, facing death and in the presence of several witnesses, she said that Dr. Emmons had performed the operation, named the time, place and fee. But she did not die. A month later the case was brought to trial and instead of the ante-mortem statement the woman herself was on the stand. On cross-examination she broke down and admitted that Dr. Emmons knew nothing at all about the case or her condition. She said she thought that she would be sent to prison herself if she did not accuse some one. Think of the fate of Dr. Emmons had she died with this awful lie upon her lips.—*E. S. M. in Am. Med. Compend and The Doctor.*

STATE REGULATION REMEDY AGAINST SPREAD OF DISEASE.—Bulletin of the Committee of One Hundred. Where the question of health regulation can be handled by local boards, such questions should be so settled. That there are problems, however, rapidly developing on account of the growing density of population, requiring federal co-operation with local boards, has become apparent to the officials of the state boards. How these conditions can most successfully be solved is a paramount problem for the next session of Congress.

The pollution of our rivers and the spread of tuberculosis should be checked, the national quarantine extended and the Bubonic Plague driven from the country.

PRESIDENT ROOSEVELT ON NATIONAL HEALTH: "Our national health is physically our greatest national asset. To prevent any possible deterioration of the American stock should be a national ambition. We cannot too strongly insist on the necessity of proper ideals for the family, for simple living and for those habits and tastes which produce



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"I also hope that there will be legislation increasing the power of the national government to deal with certain matters concerning the health of our people everywhere. I hope to see the national government stand abreast of the foremost state governments." Letter to Com. of A. S. for Advance of Science.

MRS. MAYBRICK ON UNSANITARY AND CRUEL PRISONS.—Mrs. Florence Maybrick, who, it will be remembered was many years in English prisons unjustly convicted of having poisoned, by arsenic, her arsenic eating husband is now condemning and endeavoring to reform the penitentiaries of America. Before the Young Men's Club of Dr. Parkhurst's church, New York, she said:

"I claim for all men, human rights, and the right to sunshine, to ordinary decencies, to labor. At Sing Sing strong men are shut up in cells six feet by three without ventilation, sanitary provisions or water for thirteen hours a day. She said she knew what it meant in England. For nine months she had solitary confinement in a cell seven feet by four, with a log for a seat and her food passed in through a trap in the door. They do these things there for the salvation of souls that lead to damnation."

She said the Eastern Penitentiary of Philadelphia was the worst of the 24 prisons she had visited in America. These prisoners, she said, are practically buried alive. But at Trenton, N. J., she found strong contradictions.

There they still have underground dungeons where never the step of the warden can be heard. She visited them and heard one poor man call: 'For the love of God, let me out. I have been in here five days and can't bear it any longer.' Yet, as I came up I heard a sound I had never heard in a prison before.

"'Yes,' said the warden, 'that's our string band practicing.'"

Mrs. Maybrick declared prisoners must have more sun-

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HENRY MUMAW, Elkhart, Ind.

shine. She asserted that at Sing Sing at high tide one could write one's name on the wall in the moisture.

She said she had put forward an earnest plea for such an awakening of public sentiment for reform as had already brought about the separation of the first offender and the habitual criminal.

Mrs. Maybrick is engaged in good humanitarian work and Dr. Hughes does not regret having joined in asking for her pardon.

THE INTERSTATE MEDICAL JOURNAL has absorbed the St. Louis *Courier of Medicine*. This is the fourth medical periodical absorbed by the *Interstate Medical Journal* during the past few years. Next?

A DEFECT OF POPULAR EDUCATION.—Dr. Harold Williams, in *Annals of Gynecology and Pediatrics*, noting the failure of popular education, says the failure is "because, in our leading American universities fifteen hours per week are devoted to Greek, while not a single hour per week is devoted to the study of the etiology and prevention of disease." Undue time has been spent in imparting knowledge of comparatively little importance in life, and none has been spent in inculcating the lessons necessary to develop their instinct of self-preservation, which includes the knowledge how to prevent infection of every sort. Classical education leads to refinement and to gentility, and the graces of life must be cultivated. * * * And yet, if the over-educated young person ignorantly contracts an infectious disease which may ruin his entire life all his laboriously acquired knowledge of the Greek author and of the theorems of Euclid will not prevent his being miserable and unhappy. He thinks the curriculum in our high schools and colleges should be changed. We think Dr. W. is right. More hygiene, less geography and classics, would promote the "*Mens sana in corpore sano*," so essential to sustain in the after-battle of life.

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Has a powerful action upon the blood and entire organism is indicated in **all cases** complicated with **Malaria, Scrofula**, impoverished Blood, Anaemia, etc., etc., in conjunction with Pil Orientalis (Thompson), will control the most obstinate cases of **Impotency**. "Drink Cure" cases, saturated with Strychnine, "Weak Men" cases, who tried all the advertised "cures" for impotency, and were poisoned with Phosphorus compounds, readily yield to this treatment. Pil Orientalis (Thompson) contains the Extract Ambrosia Orientalis.

The Therapeutical value of this Extract as a **powerful Nerve and Brain tonic**, and **powerful stimulant of the Reproductive Organs in both Sexes**, cannot be over-estimated. It is not an irritant to the organs of generation, but A RECUPERATOR and SUPPORTER, and has been known to the native Priests of India, Burmah and Ceylon for ages, and has been a harem secret in all countries where the Islam has planted the standard of Polygamy.

It is impossible to send free samples to exhibit in Impotency cases, requiring several weeks treatment, but we are always willing to send complimentary packages of each preparation (with formulas and medical testimonials) to physicians who are not acquainted with their merits.

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{ Pil Orientalis (Thompson) \$1.00 per box.

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EXCITEMENT, characterized by erections or even chordee, various authorities vary in their recommendations. Ringer recommends the use of aconite and camphor. Bartholow and Phillips both advise the administration of lupulin. The value of Hyoscyamus has been appreciated by many medical men for a long time, and is quite valuable. Bromidia is to be highly recommended, since it consists of chloral, bromide, hyoscyamus and cannabis indica, and acts as a somnifacient, spinal sedative and hypnotic. The dose is a drachm to two drachms an hour before bed time.—*American Journal Dermatology.*

This is the best and safest time to give this combination if its precise proportions suit the indications. The day time use of this good combination given to a walking patient in our experience developed a slavery to its use hard to shake off by the patient. We have never so administered and it would be well if Battle & Co. would send out a precaution that it is not wise to give a patient the discretion of repetition in day time, while going about especially.

CAUGHT BY A COLD.—Newspapers sometimes give some very true medical advice notwithstanding the bane of their quack advertising columns. Note the following from the St. Louis *Post-Dispatch* in confirmation. The chief addendum we would make would be to avoid draughts, especially in the sleeping room, feed abundantly of heat-producing food in cold or damp weather and clothe well, especially about the neck and feet and for the mental entonement enjoined by the paper referred to, to take life easily is as important an injunction for the conservation of the health as it is to the highwayman in his death-dealing business.

You say you have caught cold. But the fact is, the sickness known as a cold has caught you.

You don't know how, perhaps. Of course not. Cold usually catches us unawares. And yet we may be sure we have invited it.

We invite a cold every time we neglect our general

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In Epilepsy and all cases demanding continued bromide treatment, its purity, uniformity and definite therapeutic action, insures the maximum bromide results with the minimum danger of bromism or nausea.

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health. Physicians look upon a cold as congestion in some part of the body. And congestion always indicates neglect.

You have been too busy, with work or play or shopping, to look after your health. And neglect at this time of the year is doubly dangerous, because of the sudden changes of temperature, and because of the prevalence of dampness outside and dry, heated air indoors.

What exercise you have taken has been hurried. Worry has, perhaps, sapped your vitality. You have eaten more than you could assimilate. The rush for Christmas presents and entertainment has made you nervous and deprived you of sleep.

And then the cold has caught you. Plenty of people you know have been caught at the same time. But some have escaped. How? By being in a better physical and mental condition.

"And mental." We are beginning to take note of the mental factor in health conditions. Some insist that this is the only factor.

But common sense and general experience tell us that it is unwise to lose sight of any of the conditions. *Mens sana in corpore sano*—a sane mind in a sound body—is as true now as it ever was. You must use every faculty to get well and keep well.

Stop worrying. Stop hurrying. Cleanse the body and mind of all impurities. Eat to live, instead of living to eat. Take plenty of exercise in the open air. Breathe deeply. Love your neighbor. And call upon doctor for aid if you must.

Health is simplicity. It is because you have permitted your life to become complicated in many things that you are a victim to colds.

SECTION 401 OF THE AMENDED PENAL CODE of New York reads:

Any person putting up any drug, medicine or food or preparation used in medical practice, or making up any prescription, or filling any order for drugs, medicines, food or preparation who puts any untrue label, stamp or other

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designation of contents upon any box, bottle or other package containing a drug, medicine, food or preparation used in medical practice, or substitutes or dispenses a different article for or in lieu of any article prescribed, ordered or demanded, or puts up a greater or less quantity of any ingredient specified in any such prescription, order or demand than that prescribed, ordered or demanded, or otherwise deviates from the terms of the prescription, order or demand, by substituting one drug for another, is guilty of a misdemeanor.

EVIDENCE OF THE SERVICE.—A physician, on presenting his bill to the executor of the estate of a deceased patient, asked; "Do you wish to have by bill sworn to?" "No," replied the executor, "the death of the deceased is sufficient evidence that you attended him professionally.—*The Doctor.*

JAPANESE ARE LEGAL PRACTITIONERS.—The Attorney-General has announced that the medical statute does not require that an applicant for a license shall be a citizen of the United States. If he be a graduate of a duly authorized Japanese medical college, with the requisite four years' course of study, and if he be otherwise qualified, a license shall be issued if he pass the requisite grade.—*Northwest Med. The Doctor.*

THE CHRISTIAN REGISTER AND PATENT MEDICINE ADS.—"Let the galled jade wince, our withers are unwrung." Let *Collier's* expose the fakes and frauds of quacks and pretenders, we do not fear the result. Let the inconsistency of religious papers that preach morality and advertise corruption be shown and proved, we can offer a clean record. For eighty-five years no advertisement has been accepted by either of the two publishers (who have covered nearly the whole of that long period), which they believed was written with intent to debase or deceive the reader. A lawyer said last week that ministers were not quick to see the difference between right and wrong.

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From the frequency with which they sign testimonials of doubtful things one might infer that incredulity, if not insensibility to moral distinctions, make them an easy mark for those who live by plundering the public."

This is a journal for Christian physicians to take.

PHYSICIAN was a composed man, who performed neither on his own trumpet, nor on the trumpets of other people. Many wonderful things did he see and hear, and much irreconcilable moral contradiction did he pass his life among; yet his equality of compassion was no more disturbed than the Divine Master's of all healing was. He went, like the rain, among the just and unjust, doing all the good he could, and neither proclaiming it in the synagogues nor at the corners of streets.

As no man of large experience of humanity, however quietly carried it may be, can fail to be invested with an interest peculiar to the possession of such knowledge, Physician was an attractive man. Even the daintier gentlemen and ladies who had no idea of his secret, and who would have been startled out of more wits than they had, by the monstrous impropriety of his proposing to them "Come and see what I see!" confessed his attraction. Where he was, something real was.—*Abstract Albany Medical Annals. Charles Dickens in Little Dorrit.*

RAILWAY DEATHS AND DISASTERS.—If the Santa Fe Railroad company, says the *Denver Post*, does not look to its own public obligations more sharply it will soon be able to replace its mileposts with tombstones. This is true of other roads running into Colorado as well, but it is poignantly true of the Santa Fe. There is not a week passes without its long list of dead increasing sadly; there is not a day dawns that does not speak the anniversary of the dying of some man. * * * Husbands, brothers, lovers; dear, dead women, whose voices will never lift again. And the people, the silent, patient, enduring people, bow their necks to the yoke of disaster and accept these dead as inevitable. Year by year the long list goes

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PLAIN, BLUNT QUESTIONS.

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Aren't these mere palliatives?

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THE NEW ORGANIC IODINE COMPOUND.

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It gets the remedial agent into the blood and to the seat of the morbid process without offense to either the palate or the stomach.

Insoluble in water or acid.

Soluble in alkaline secretions.

Iodalbin contains 21.5% of iodine. It produces the therapeutic effects of potassium or sodium iodide, with a minimum of physiological disturbance.

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Supplied in ounce vials and in 5-grain capsules (bottles of 100).

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on growing until the headlights of our Western trains shine almost everywhere on places where the dead faces lifted silently to the night.

FOR THE NEURASTHENIC.—Oftentimes the neurasthenic patient can be promptly started on the road to recovery by a temporary change of scene and the use of a good tonic. Gray's Glycerine Tonic Compound is of especial value in these conditions of nervous exhaustion, and it often supplies just the right support and reconstruction needed.

ELONGATION OF THE UVULA.—As a gargle in sore throat or elongation of the uvula, Kennedy's Dark Pinus Canadensis has very general indorsement. Teaspoonful to glass of water.

VIN MARIANI NOT A COCAINE PREPARATION.—The Vin Mariani Company notify us and explain as follows:

"*The American Druggist*, August 19th, 1907, in reply to a query, *erroneously stated* that Vin Mariani is regarded by the Health Department of New York as a cocaine preparation, and can only be sold under restrictions of the anti-cocaine ordinance."

Upon our protest that this was a misstatement of fact, injurious to us and to the trade handling Vin Mariani, the publishers in investigating the source of their information submitted the question personally to Dr. Darlington, the Commissioner of Health, who promptly repudiated the statement as unauthorized. He further said that "Vin Mariani, under the new label adopted by the manufacturers, is not regarded as a cocaine preparation, and can therefore be sold as freely as any other medicated wine that does not contain cocaine."

In a retraction of their misstatement, the Editor of the *American Druggist*, August 26th, 1907, referring to the status of Vin Mariani under the various state laws, sets forth the opinion of the New York Board, and concludes: "We have no doubt that the Health Departments of other

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cities throughout the country will be influenced by the judgment of the New York officials, and the precedent established by them will be followed generally."

ONE ARM OF A REAL STRAP-HANGER LONGER THAN THE OTHER.—John C. Scovel, municipal court judge, the other day was measured for a coat. When the coat was delivered he thought that the sleeves did not fit right, and comparing them found one to be an inch longer than the other.

Indignant, the judge took the coat back to the tailor without even trying it on. His tailor merely smiled.

"Just try it on," he said. Putting on the coat the judge found the sleeves extended to the same place on each hand.

"You do a great deal of riding on the street cars, don't you?" said the garment worker.

Judge Scovel admitted that each morning and evening he had for years been obliged to make a long, wearisome journey on street cars.

"Hanging on to a strap," said the tailor, "has made your right arm somewhat longer than the other. I continually have strap-hanging customers, and so have become careful in measuring the arms and making each sleeve according to the length of the arm."

Judge Scovel kept the coat.

HOME-MADE BUTTERMILK.—It is now within the power of every household to have an abundance of that refreshing and healthful summer (also winter) drink—buttermilk. To the present time no one knew of any source of buttermilk except from the butter-maker; but now-a-days the butter-maker does his work so well that the buttermilk is entirely deprived of the delicious little grains of fat which add so much to its food qualities as well as to taste. True buttermilk, made direct from fresh, rich milk, within a few hours, of the finest flavor and taste, nutritious and more excellent than the article as originally known, can now be prepared in any kitchen.

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This is done by taking a quart of fresh, rich milk, adding a pinch of salt and about half a pint of hot water to raise the temperature to body heat, and lastly adding a tablet which contains a pure culture of lactic acid bacteria. Place all in a pitcher, cover with a napkin, and let stand for twenty to twenty-four hours at the ordinary temperature, and there is your perfect buttermilk. The tablets are made by Parke, Davis & Co., the pharmaceutical and chemical manufacturers of Detroit, Michigan, and are called "Lactone" or buttermilk tablets.

On the farm in the process of buttermaking the cream is allowed to sour spontaneously and is then churned. The souring is the lactic acid fermentation caused by lactic acid bacteria or ferments. The difference between the new and old process is one of method and not result. In the old, the lactic fermentation is waited for and expected to occur spontaneously, with disappointment sometimes. In the new, the ferment in pure culture is directly planted in the milk; and the desired fermentation is secured without fail. In Bible days, spontaneous fermentation of dough was depended upon to leaven or lighten bread, and failure frequently attended the process, the dough putrefying instead of fermenting, and was then lost. Finally man learned to add yeast to the dough and not to depend upon spontaneous processes, with the result of always securing the right fermentation and making a better and more nutritious bread. This new buttermilk process is a like improvement.—*Monthly Bulletin Indiana State Board of Health*, June, 1907.

DR. STEPHEN L. STRICKLER, of Boggstown, Indiana, favorably comments on the action of Cactina Pillets as follows:

"I have used Cactina Pillets for ten years and can say they are more to be relied on than most anything in medicine that I know. They surely must be made of the drug gathered at the most favorable time of the year, because the cactus you buy on the market is not reliable." Cactina Pillets have been on the market for twenty years and

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testimony of this kind has been heaped upon it by the medical profession, They are being employed with benefit in functional, cardiac and circulatory disturbances and exhibit no cumulative action.

MIXED BROMIDES.--Dr. Robert J. Preston, Brown-Sequard, Hazard and other learned men of the profession have strongly advocated a combination of bromide salts in preference to the use of potassium bromide alone. The salts of the lighter metals, as sodium, ammonium and lithium, seem to have less of the untoward action than the potassium salt. In Peacock's Bromides we have a union of these salts that has proven a most available and trustworthy combination.

THE PROGRESSIVE HEALTH COMMISSIONER of Pennsylvania, Dr. Samuel G. Dixon, had published an order forbidding Pullman car porters to brush the clothes of passengers in the aisles of the cars. The endurance of this noxious custom for years is an evidence of long suffering patience of the American travelling public. Apart from its unhygienic features, this scattering of dust through a car and over the already sufficiently dirty and uncomfortable passengers has been long voted an unmitigated nuisance. The practice is worse than useless as a means to cleanliness; dusting off and spreading about the germ laden accretions from the garments of men in all conditions of health and disease.—*Medical Record*.

We endorse and add that the dust brush should be abolished on Pullmans for seats and floors as well as suits. The Pullman company charges enough for cramped accommodations to provide suction cleaners and dusting rooms, individual soaps and many other sanitary things they still omit. They should give the public intelligent, sanitary porters and a porter's room.

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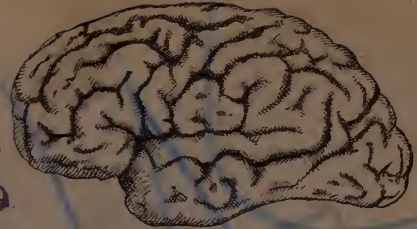
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NOVEMBER, 1907.

No. 4.

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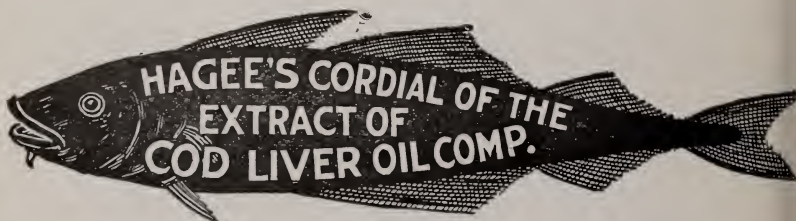
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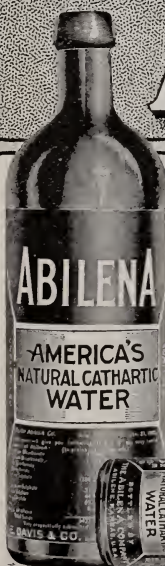
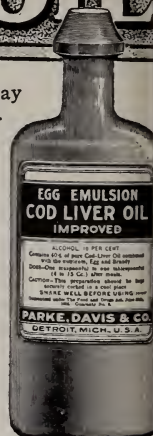
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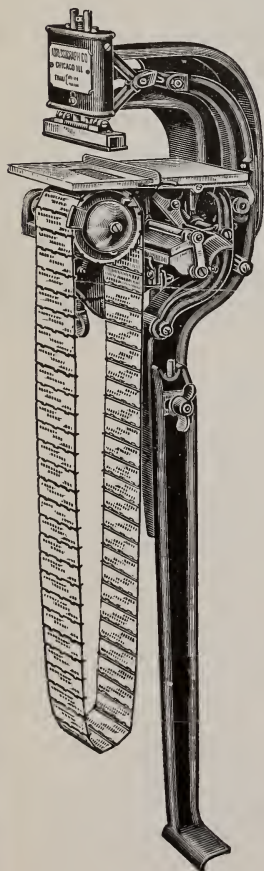
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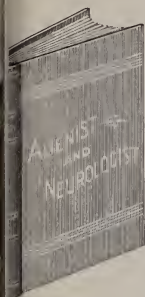
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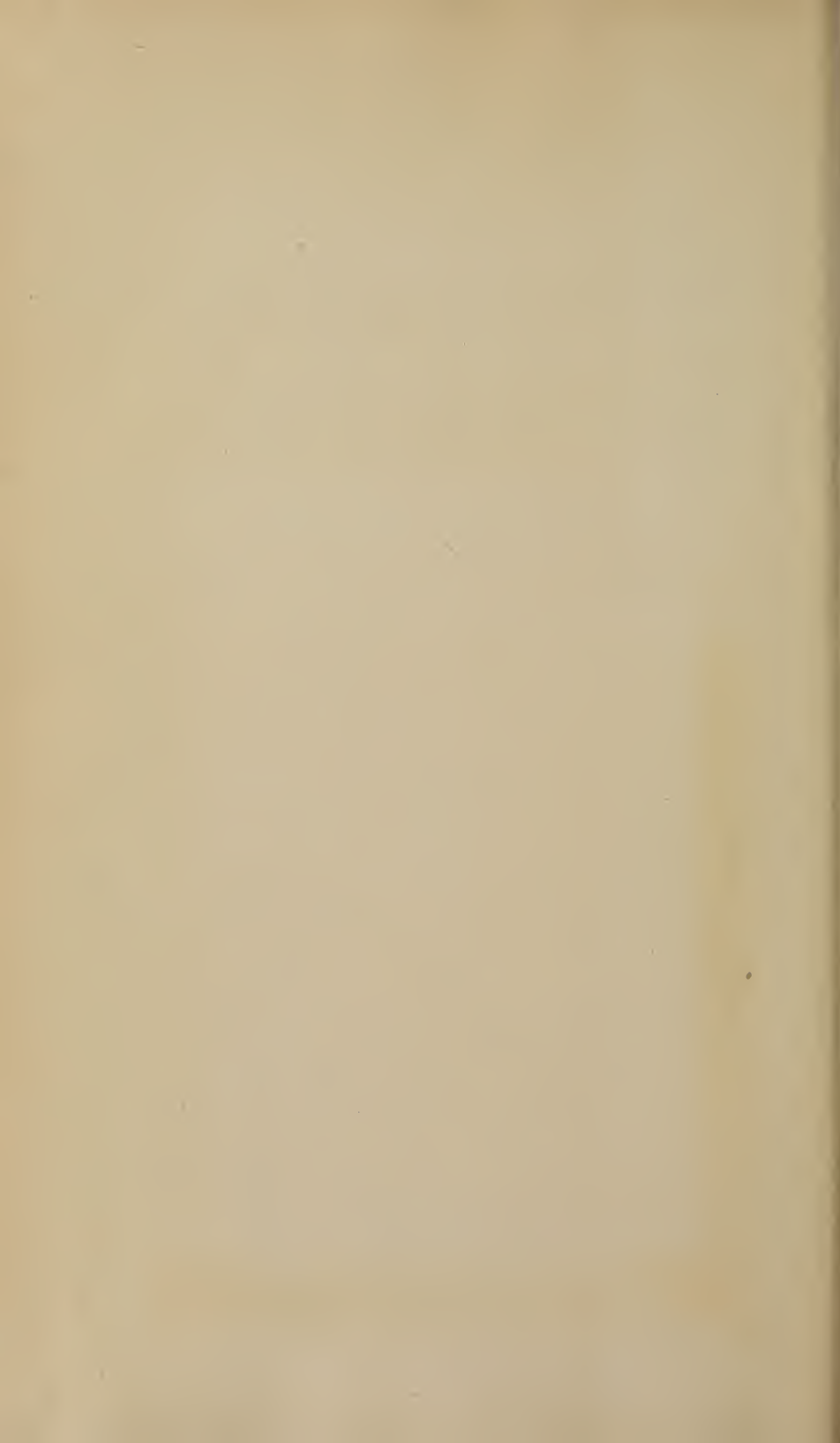
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